

Seventh Issue]

AREA AND YIELD

OF CERTAIN PRINCIPAL CROPS IN INDIA

RICE

OILSEEDS

WHEAT

JUTE

COTTON

INDIGO

SUGARCANE

FOR VARIOUS PERIODS FROM

1891-92 to 1904-05

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INTRODUCTORY NOTE.

THE Government of India issue periodically during the year estimates of the yield of certain crops compiled, from local statements, in the Statistical Department.

The general practice is to issue a preliminary forecast, a second estimate and a third (and final) estimate, fuller and more precise than the first two, but for both cotton and sesamum, of which there are early and late varieties, four reports are issued. The summaries in the present publication are a condensation with corrections of the final estimates presenting in a connected and convenient form a record of the conditions of the season as reported at the time from each province.

Following the summaries is a set of tables, abstracted from those appended to the final estimates, in which are stated the area sown and the estimated yield of the crops. The estimates are not made for the whole of India and are necessarily, in the most favourable circumstances, only approximations to the truth. The very complete agricultural records in most of the provinces in connection with the assessment of the land revenue enable the area sown with each crop to be often stated with great exactness, but an equally important factor in determining the outturn, namely, the average yield per acre, has to be estimated, and exactness can be obtained only by the most careful analysis of the classes of soil, the methods of cultivation, and the conditions of each season, that is generally the quantity and dates of the rainfall in every part of the reporting area. The quantitative estimates are thus often imperfect and generally they have been too low. The attention recently paid to the estimates of the cotton crop, which will doubtless lead to greater accuracy in future, has shown that some of the estimates relating to past years were extremely defective. The revision of the estimates which was attempted has been only partially successful, as the known deficiency in the total production cannot always be distributed owing to the large unregistered movements of cotton across provincial boundaries by road, and the want of reliable information for some of the Native States. Arrangements were, however, made to obtain in future information from certain parts of India for which forecasts had not been previously prepared, and to base the estimates of the yield on data corrected by the ascertained actuals of past seasons; and although estimates for the *zamindari* areas of Madras are still lacking, the reported outturn in 1904-05 shows the great improvement of a small surplus over the exports and estimated mill consumption, instead of the customary failure to account for the whole of the cotton coming into sight.

Attention has also been paid to the improvement of the jute forecasts, and the yield for past years, from 1895 onwards, has been corrected by the statistics of exports and consumption, but the estimates of the area cultivated are still based on uncertain data, although they have recently been improved. Next to cotton and jute the estimates of acreage are most complete for wheat, as the only wheat-growing areas of any importance for which forecasts have not been obtained, are the Native States of the Panjab. For the other crops, however the estimates of area are only for particular regions where those crops largely grown, and not for the whole of India. Thus, the rice estimates only to Bengal, Lower Burma, and Madras, and those for sugarcane to R

Madras, the United Provinces, the Panjab, and the North-West Frontier. Again, for the reporting territories the estimates are sometimes imperfect, for, with some exceptions, those tracts have been excluded which have not been accurately surveyed or are held under privileged tenures, and hence do not possess the regular establishments maintained elsewhere for reporting the area placed under each crop. The most serious omission from this cause is in the figures for Madras, which is a large producer of rice, cotton, sesamum, and indigo, but has hitherto made forecasts only for the Government villages or about two-thirds of the area of the British districts. The Feudatory States within provincial boundaries are also omitted from the forecasts of all the provinces except Bombay and Sind. But for these omissions and a certain element of uncertainty in regard to crops which are sown as mixtures of two or more crops in the same field, the estimates of area relating to the Panjab, Berar, the United Provinces, the Central Provinces, and Madras may be regarded as fairly exact. The statistics for the British districts of Bombay also stand in the front rank, but in this publication they are combined with the more conjectural figures of the provincial Feudatory States as a large proportion of the cotton, oilseeds, and wheat is grown in those States. The statistics of area for Bengal which relate to nearly the whole of the cultivated portion of the province, omitting unimportant Feudatory States, are more conjectural as they rest on estimates, based on varied sources of information, which have been verified by cadastral surveys for not quite a fifth of the area.

The statistics for the State of Hyderabad and the numerous States in the Central India and Rajputana Agencies rest on similar data to those of British India, and like them mostly refer to tracts where a reporting agency exists, though not equal in efficiency to that of the neighbouring British Provinces. Estimates are also included for some of the revenue-free lands held on privileged tenures.

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AREA AND YIELD

OF

CERTAIN PRINCIPAL CROPS IN INDIA

SUMMARY OF THE CONDITIONS OF THE SEASON FROM 1891-92 TO 1904-05

RICE

In Bengal the rainfall was unusually deficient in the period from July to October, and widespread injury was done to the winter crop. Deficient rain during the early part of the season also affected the autumn crop. 1891-92

In Madras too the season was adverse, the rain failing over large areas.
In Burma conditions were satisfactory.

In Bengal the autumn rainfall was general and favourable, inducing extended cultivation. 1892-93
In Madras also the season was favourable and the condition of the crop good until November when the rains failed in places.
In Burma conditions were good everywhere.

Throughout Bengal there was abnormally heavy rain, with destructive floods in east Bengal and parts of north Bihar; but on the whole the season was very favourable for winter and not unfavourable for autumn rice. 1893-94

In Madras the season was generally favourable for sowings, and though the rains of the autumn and winter injured the crop in some places, the yield was three-fourths of a full average.
In Burma the season was favourable.

Over the greater part of Bengal the late rains were favourable to winter rice which gave a better crop than had been known for some years. For the autumn rice the season was in the main favourable. 1894-95

In Madras the south-west monsoon was late and the rainfall generally partial and insufficient, but in the Northern, Central, and Decan districts, and in Tanjore and Trichinopoly, the crop was on the whole good. Elsewhere the unfavourable character of the north-east monsoon affected the crop.

In Burma the crop suffered somewhat from insufficient rain.

The season in Bengal up to September was on the whole favourable, though rain was deficient in some districts. The deficiency was marked in September and October over large areas, and there was practically no rain in November. 1895-96

In Madras the crop generally was fair, though in some places, in consequence of the failure of the early rains, the yield was small. The crop was also affected in Godavari and Kistna by floods.

In Burma the late rains were unequally distributed, but the yield, owing to the larger area sown, was satisfactory.

In Bengal the season was very unfavourable, the early withdrawal of the monsoon seriously affecting the crop. A little good was done by rain in February, but there was an extensive failure of the crop, with famine over large areas, especially in Bihar. 1896-97

In Madras the crop was generally reported to vary from fair to good, except in Ganjam and Vizagapatam where large areas completely failed, and in the Decan districts where there

RICE

was only a half crop. In these tracts famine prevailed. Conditions were better in the southern districts.

In Burma the season was favourable and the crop excellent.

1897-98

In Bengal the anxiety of the people to augment their reduced stocks of food induced them to substitute autumn rice over extensive areas for non-edible crops; and a good season for this crop was followed by a still better one for the great winter rice crop.

In Madras an extended area was sown, the increase being attributed to the heavy rainfall of the south-west monsoon. The conditions were on the whole sufficiently good, though qualified by the failure of the north-east monsoon, to produce a fair yield.

In Burma the conditions of the season were uniformly favourable.

1898-99

In Bengal the season was in the main favourable, and an extended area was placed under both autumn and winter rice. Though injury was done by floods in September in north Bihar it was confined to comparatively small areas, and the heavy rain benefited the crop beyond the submerged tracts and on high lands.

In Madras the rainfall was deficient in the northern districts and the Deccan, and excessive in the southern part of the Carnatic.

In Burma some injury was done to the crop by the failure of the rains towards the end of the season.

1899-1900

In Bengal the season was generally unfavourable to the autumn rice, the rainfall being excessive in June, July, and August, and below the average in the following months. In some districts also the autumn rice was injured by insects. The season was not, however, so unfavourable for the winter rice crop, which is far more important than the other.

In Madras heavy rain in September and October enabled the cultivators to plant rice freely, but the season did not continue to be favourable for a good yield, especially in the Deccan, Carnatic, and southern districts.

In Burma the season was good and the crop large.

1900-01

In Bengal the season was on the whole not favourable for autumn rice, the rainfall being on the whole deficient and capriciously distributed. For the winter rice also the season was not favourable, and the absence of rain at the time for sowing and transplanting led to a decline in the area sown.

In Madras the season was not unfavourable and the crop was generally satisfactory.

In Burma the crop was grown in normal conditions.

1901-02

In Bengal the season was not entirely favourable for the autumn rice. From April to August the rainfall was unevenly distributed, and in July it was deficient almost everywhere. General and copious rain fell in September, but in October the rains ceased abruptly. For the winter rice the season was more unfavourable. The abrupt termination of the monsoon in September, for there was very little general rain in October, did great injury to the crop, and in all the Bihar districts, where the rainfall in June was also very deficient, it was a failure. The weather was seasonable during transplantation which led to an increase in the area sown.

In Madras the season was not so favourable for early planting as in 1900, but owing to good supplies of water from the irrigation works and generally good rain in August and September an area about equal to the average yielded a crop rather more than the average of recent years.

In Burma conditions were favourable. Rain fell at the end of the first week in February, but the crop, which was greatly in excess of the average, was but very slightly injured.

1902-03

In Bengal the season was not quite favourable for the autumn rice. The ante-monsoon showers were abnormally heavy, and the monsoon rainfall which came somewhat late was unevenly distributed. October was abnormally dry and November was literally rainless. For the winter rice the season, though capricious, was not unfavourable. The weather was seasonable during transplantation. And had it not been for the deficiency of the October rains, the crop would have been much above the average.

In Madras, there was an increase in the area sown chiefly in Cuddapah, Chingleput, and North Arcot, owing to the favourable character of the season. The condition of the crop was generally good.

In Burma floods caused damage in Tharawady and Thongwa and a decrease in cultivation in Henzada. In Myaungmya the fallow area was large owing to cattle disease and sickness among the cultivators, and in Prome owing to untimely rainfall; otherwise prospects were bright.

In Bengal the season was generally unfavourable for the autumn rice owing to a deficient rainfall in the early part of the season and heavy falls at and after the harvest. For the winter rice also the season was not altogether favourable, for although general and abundant rainfall was received at the latter part of the season, the defect at the beginning and, except in Orissa and North Bengal, in the total fall of the season affected not only the area sown, but also the growth of the plants.

In Madras an extended area was sown owing to good and timely rainfall. The condition of the crop was reported to be fair.

In Burma prospects were very favourable, though slight damage had been caused by rain in some districts. The quality of the new grain was reported to be excellent.

RICE
1903-04

In Bengal the rainfall was unseasonable and ill-distributed, and in many parts of Bihar heavy rain and floods did considerable damage to the autumn rice. For the winter rice also the season was not a favourable one, though sowings were over a larger area than in the preceding year. The crop suffered from drought from the middle of September, but in Bihar it was to a great extent saved by good rain in the latter part of October. A flood in eastern Bengal in November did considerable damage to the standing crop, while the rest of the province continued to suffer from the drought.

1904-05

In Madras a restricted area was sown owing to the failure of the rains; and the crop withered in parts from want of moisture.

In Burma the sowing rains were seasonable and sufficient, and consequently an extended area was sown. The crop, however, suffered in places from floods, and high winds and in consequence of the unfavourable break in the rains during October the grain threshed out light in several districts.

WHEAT

In the Panjab the rainfall in September and October was generally very favourable, but the subsequent break and the failure of the winter rains interfered with the full growth of the plant on unirrigated land. Abnormally hot weather in March, as well as cold winds and frosts in February, injured the crop.

1891-92

In the United Provinces heavy rain fell in August and September and greatly interfered with the preparation of the soil, but the moisture helped successful germination. The winter rains were delayed, but rain in February benefited the crop. Hot winds in March and April damaged the grain, especially in the western districts.

In Bengal conditions were generally unfavourable. Abnormally dry weather from October materially interfered with sowing operations and affected germination and growth, and the crop was injured by early west winds in some parts of Bihar and north and east Bengal.

In the Central Provinces the season was abnormally dry, no rain falling from October to January. The area sown was therefore restricted and the grain dried prematurely.

In Berar the monsoon was characterised by excessive rain at sowing time, and the season was unfavourable, the north-east monsoon ceasing too early. The crop suffered from lack of moisture.

In Bombay the rainfall was good in Gujarat and Khandesh, but deficient in the Deccan and Karnatak. The crop suffered from adverse winds and absence of moisture in Khandesh, while elsewhere in the Deccan both unirrigated and irrigated crops suffered from the absence of the late rains. In Sind conditions were less unfavourable, but frost and westerly winds affected the crop in places.

In the Panjab the season was favourable, and continued rains in the winter months encouraged extensive sowings and improved prospects.

1892-93

In the United Provinces the monsoon rain, scanty in the beginning, was excessive and continuous in August and September, but fine weather then supervened and was favourable to germination. The winter rains benefited the crop, especially on unirrigated land.

In Bengal the season was unfavourable owing to deficient rain at sowing time, but the winter rains were beneficial except in north Bihar, though excessive rain in February and March injured the crop.

In the Central Provinces rain in October was favourable on the whole, though excessive in Nagpur. The crop was greatly injured by rust.

In Berar the season was favourable. The monsoon arrived late and this fact encouraged sowings of wheat, though excessive rain in October interrupted sowings in places. The crop suffered from blight in January and from stormy weather in March.

In Bombay the late rain was sufficient in Gujarat, conditions were favourable to extended cultivation in the Deccan and the Karnatak, and seasonable rain, and sufficient inundation encouraged sowings in Sind.

WHEAT
1893-94

In the Panjab the season was very favourable. The winter rains were copious and most seasonable, though the crop was injured by rust in places, especially on low-lying lands.

In the United Provinces the monsoon set in unusually early and rain was excessive and continuous from July to October. Dry weather continued to the end of December, and rain in January and February was generally beneficial, but the crop was greatly injured by high winds and rust.

In Bengal also the early rains were excessive, but prolonged drought afterwards, and the absence of the winter rains until February, seriously affected the crop. Prospects were further impaired by wet and cloudy weather late in the season.

In the Central Provinces sowings in Nagpur were greatly restricted in consequence of the losses from rust in 1892-93.

In Berar the season was good, though it varied considerably in different districts, the rainfall in some being excessive.

In Bombay the monsoon rainfall was excessive for *kharij* sowings and the area left unsown was utilized for wheat in the eastern Deccan. Sufficient late rain encouraged sowings in the Karnatak, but elsewhere wheat was replaced by cotton and oilseeds. In Sind the absence of rain and consequent insufficient inundation restricted sowings.

1894-95

In the Panjab the monsoon rain was excessive and floods ensued in the central districts, but the monsoon ceased early, and the winter rain was sufficient. The harvest was excellent.

In the United Provinces the continuance of excessively heavy rain, especially in the central and eastern districts, caused a slight contraction in the area sown. Wet and cloudy weather and strong winds considerably affected the crop and shrivelled the grain.

In Bengal, in consequence of the late arrival of the monsoon rain, the area sown was restricted, and the crop was seriously affected by prolonged drought from November to the middle of January.

In the Central Provinces the area was greatly contracted, the crop suffered severely from heavy rain at the time of sowing, and excessive moisture favoured the spread of fungoid disease in many districts.

In Berar, owing to heavy rain at the time of sowing, the season was not so favourable and rust was common.

In Bombay and Sind the season was on the whole favourable, and the yield satisfactory, although the crop suffered from cloudy weather, rust, and frost.

In Hyderabad heavy rain late in the season reduced the yield.

1895-96

In the Panjab the monsoon rains were scanty and ceased early, the winter rains were a failure, and disaster was averted only by a general fall in the end of January and the beginning of February. At sowing time no useful rain fell in any district, and the area sown was greatly restricted in unirrigated tracts dependent entirely on the rainfall; in irrigated tracts, however, there was a considerable increase. The season continued very unfavourable for land dependent on rain.

In the United Provinces the character of the season was almost exactly like that in the Panjab, but the rain of January and February did not extend beyond Meerut and Rohilkhand and part of Agra; nor was it sufficient where it fell to remove the effect of the prolonged drought over any great area.

In Bengal also the autumn rains ceased early and the winter rains failed.

In the Central Provinces and Berar the monsoon rains came to an early and abrupt termination as elsewhere. The conditions were unfavourable at sowing time and became worse later, with the result that a deficient crop was taken from a contracted area.

In Bombay and Sind the season was on the whole unfavourable, owing generally to the causes which affected the other provinces. The area and yield were both very unsatisfactory, the yield in most places being only sufficient for local consumption.

1896-97

In the Panjab the monsoon rains were deficient, and sowings were restricted on unirrigated, and stimulated on irrigated land. Fairly good and timely rain in November, December, and January permitted of late sowing; and copious and well distributed rain in February, March, and April, which in an ordinary year would have been injurious, was beneficial to the crop.

In the United Provinces the autumn rain was very irregular and scanty, and greatly interfered with the preparation of the land. The winter rains were generally timely and well distributed, and improved prospects; but towards the end of February strong, warm west winds did considerable damage. The area sown was much less than the average, but where irrigated in time the crop was good.

In Bengal the season was very unfavourable until the end of November. Rain in December, January, and February improved the crop, but some injury was done to wheat lying on the threshing-floors by rain in March.

In the Central Provinces the winter rains were favourable except in four or five districts.

WHEAT

In Berar there was practically no rain at sowing time. Large tracts reserved for wheat remained unsown, much of the grain that was sown failed to germinate, the area reported under wheat was hardly more than half that in 1895-96, and the crop was almost a general failure.

In Bombay, owing chiefly to the general failure of the late rains, sowings were greatly restricted.

In Rajputana the area sown was reduced, partly by reason of deficient rainfall at sowing time and partly through the substitution of linseed and gram for wheat in consequence of successive bad harvests of wheat.

In Hyderabad the season was almost equally unfavourable.

In the Panjab the late autumn rains were sufficient and well distributed. Rain in December benefited the standing crops and encouraged further sowings, and abundant rain in February after a prolonged drought was particularly beneficial. Subsequent conditions were favourable for harvesting operations, but storms in the second-half of May damaged the grain on the threshing-floors.

1897-98

In the United Provinces the season was very favourable for sowing. Rain was general and well distributed except from November to January when irrigation was freely resorted to. The prolonged dry weather, and the strong wind which followed, affected the crop on unirrigated land, but it was considerably benefited by rain in February.

In Bengal the season was favourable; the autumn rain was copious and well distributed, and the crop germinated satisfactorily.

In the Central Provinces conditions were not as favourable as could have been desired, the autumn rain being insufficient for sowings. The crop suffered from insufficient moisture, but rain in February was beneficial to the late sown crop.

In Berar, too, the season was unfavourable, and the exhaustion of food-stocks during the famine induced sowings of jawar over much of the area usually reserved for wheat. No rain fell after the wheat was sown, but the unusually cold winter months and heavy dews benefited the crop.

In Bombay the season was on the whole unfavourable, continuous and excessive rain at sowing time preventing full sowings in some places.

In Hyderabad the seasonal conditions were not so unfavourable as in the preceding year.

In the Panjab conditions were on the whole not favourable. Deficient rain in August retarded sowings, there was but little rain in the succeeding months except in September, and the injury thus caused on lands not under irrigation was increased by a cold wave in January, and by rust and insects. Finally storms and high winds in May damaged the grain on the threshing-floors.

1898-99

In the United Provinces the season was on the whole very favourable. The monsoon was late and the rain irregular and unevenly distributed, but it gave abundant showers and sufficient moisture at sowing time. The winter rains were timely and sufficient.

In Bengal the season was uniformly favourable: the monsoon rain was heavy, and the early subsidence of the floods left a deposit of silt which was useful to cultivation. The winter rain also was of great benefit.

In the Central Provinces the seasonal conditions were not good. The heavy autumn rain interfered with the preparation of the soil, and the sudden cessation of the monsoon in the second-half of September retarded sowings and produced defective germination. No rain fell until February when it could not be expected to benefit a crop which had withered for want of moisture. Injury by hail and frost was also reported from some of the northern districts.

In Berar the season was not unfavourable at sowing time, but the sudden cessation of the monsoon towards the end of September and the failure of the winter rains left insufficient moisture for the full development of the plants, and the grain was ill-matured and small.

In Bombay the season was not on the whole favourable. The seasonable and sufficient rain which fell when the seed was being sown was interrupted later, and sowings were delayed, and it was not until September that rain fell again in quantity and improved prospects. The winter rains were also of benefit. On irrigated land conditions were fairly good. In Sind the season was decidedly bad, and sowings were restricted owing to insufficient inundation, and scanty rainfall.

In Hyderabad the rains which followed sowings were generally favourable, but when the plants were arriving at maturity rats infested the fields.

In the Panjab the monsoon rain to the end of September was partial and scanty, and in October, November, and December there was hardly any rain. About the third week of January, however, there was a general fall, and further rain in February, followed by showers in March and April, helped greatly in bringing the crop to maturity.

1899-1900

In the United Provinces the conditions of the season approximated closely to those described as prevailing in the Panjab, and the wheat crop did very well.

In Bengal the want of rain at sowing time was felt in some districts, leading to a contraction in the area sown. On the whole, the season was not favourable to wheat: the

WHEAT

rainfall was irregular and badly distributed, and in some districts the crop suffered also from hailstorms.

In the Central Provinces the monsoon began well, but its abrupt cessation at the close of September impeded successful sowings. The October rain, which determines the successful germination of the wheat crop, was entirely absent. There was none in November and December, and the few showers which fell at the close of January were too late to do any appreciable good. The soil was dry, the heat abnormal, and the usual dews did not fall.

In Berar the season was disastrously bad. Even the best black soils failed to retain enough moisture for the successful growth of wheat, and in five out of the six districts sowings were not attempted on unirrigated land. Practically whatever was grown was irrigated from wells, and in many places the wells failed. The crop was in almost absolute failure.

In Bombay the season was so bad that in many places no sowings could be made. In September the rain was deficient, and it failed altogether in November and December. Of the total area sown in the British districts of the Presidency proper, about 55 per cent was reported to have failed altogether to produce any crop; most of the crop which was obtained was brought to maturity under irrigation, but even that crop was poor in consequence of the failure of water in wells and canals.

In Hyderabad the conditions and results were similar to those in Berar.

1900-01

In the Panjab, after the heavy rains in August and September, large sowings were made on unirrigated lands and the winter rains from December to March were so opportune throughout the province that in some districts the crops on wet lands were grown without the aid of irrigation. The crop was attacked in some districts by rust, favoured by the cloudy weather of February and March, and it had to contend in places with strong dry winds, hail floods, excessive rain, and water-logging, as also, when it was on the threshing-floors, with untimely rain and storms. The yield was therefore smaller than might have been expected from the large area sown.

In the United Provinces the autumn rains were so distributed as to permit of the adequate preparation of the fields for sowing. There was abundant moisture in the soil, and the crop was sown in good time. Until the close of January the prospects were very bright and a full normal yield was expected; but the prolongation of the winter rains with cloudy weather into February induced rust in almost every district.

In Bengal the continuance of the winter rains into February caused serious injury to the crop which was then ripe, and in Bihar, which had promised well, there was but a poor yield.

In the Central Provinces continuous rain in August and September interfered with the preparation of land, and the absence of the usual October showers was unfavourable to sowings in some districts. Germination was generally good, and, except in Nagpur, prospects were favourable until the continued cloudy weather and rain in January and February induced rust which caused serious injury.

In Berar the monsoon rainfall was in excess of the normal, but the rains ceased suddenly at the end of September, and the land, which had become thoroughly parched during the famine year, did not retain sufficient moisture for the successful growth of wheat. No winter rain fell until the crop had come into ear, and it was then too late to be of much benefit.

In Bombay the rainfall in September and October was deficient in most places, and the land did not retain sufficient moisture to allow full sowings. Practically no rain fell in November and December, and the young crop withered. Irrigated crops fared better for a time, but they also suffered from scantiness of well water, while in places in Gujarat rust, insects, and cloudy weather did harm. In the Deccan and Karnatak the crop on unirrigated lands failed almost entirely, and the yield generally was unsatisfactory. In Sind alone was the season generally good.

In Hyderabad sowings were not conducted in favourable conditions, the rain holding off, but some little compensation was obtained from the winter rains.

In Rajputana and Central India both area and yield were much below the average.

1901-02

In the Panjab the monsoon rainfall was less plentiful than usual and ceased early; the winter rains failed entirely. There were no late sowings, and the whole crop went practically without rain until the latter half of March when slight showers saved the withering crop from total destruction in some places. High winds and severe frost in February also proved detrimental to the standing crop, and the yield was decidedly below the average. On irrigated lands the failure was far more extensive. On lands irrigated by wells a considerable part of the crop was in some places used as fodder for cattle.

In North-West Frontier Province the season throughout was one of unusual drought. From October to the end of February no rain fell and sowings on unirrigated lands were much reduced; the crop, where sown, in most cases withered away in March. A normal area was sown on irrigated lands which account for one-third of the crop of the season.

In the United Provinces the monsoon of 1901 was abnormally delayed, and general rain did not set in until the 10th of July. The fall in July and August was well distributed and sufficient; but in the next two months it was deficient in the Meerut division and in parts of Agra and Rohilkhand where sowings in most places were effected with the aid of

irrigation. November and the first three weeks of December were entirely rainless, and irrigation was resorted to wherever possible. The season was unusually dry and the unirrigated crop suffered generally from drought.

In Bengal the rainfall in Bihar was deficient in September and seriously in defect in October, and there was practically no rain until March, when it was too late to benefit the crop. There was a contraction in the area sown owing to drought at the sowing season in Bihar where the yield was much below the normal.

In the Central Provinces the season was abnormally dry, the October rain on which the germination of wheat largely depends, being represented by only a few local showers, and there was no rain thereafter except in the first-half of January in some places. Frost, rats, and insects also injured the crop.

In Berar the monsoon rainfall was in excess of the normal, and although there were no winter rains, the moisture in the soil at sowing time was sufficient to promote the growth of the young plants and to bring the wheat satisfactorily into ear. At this stage, however, rats appeared in large numbers and did considerable injury, destroying in some localities almost the whole crop of the field in a single night.

In Bombay there was a contraction in the area sown owing to the deficiency of late rain. In Gujarat and north Deccan, the September rain was very deficient and sowings made little progress until after the October rains. No rain fell in November and December, and the crop suffered considerably not only from want of surface moisture, but also from the scanty supply in the wells. The surviving crop was further almost destroyed by a very severe plague of rats. In the south Deccan and the Karnatak, the September rain was generally sufficient, but that in October was below the average and checked full sowings. Later rains were light and partial and the crop withered in many places, particularly in the eastern tracts where no rain fell and no irrigation was possible. Damage by insects and disease was also reported from a few places. The Sind crop was fairly good.

In Hyderabad conditions were at first somewhat favourable, but rats did considerable injury in places and over a large area; the late rains were also not favourable.

In Rajputana both area and yield were much below the average. In Central India the area and yield were larger than the quinquennial average, but a little short of the decennial average.

In the Panjab conditions were favourable for early sowing on irrigated lands, and a considerable area was sown, except in the Mooltan division where canal water and rainfall were insufficient. The practical absence of rain until the fourth week of January rendered late sowings on dry lands impossible, and caused much injury to crops on such lands. In the submontane and central districts good rain in January, considerably improved prospects. February was practically rainless, and a very anxious period ensued until the advent of copious, frequent, and general rain in March. Good showers continued well into April, which was beneficial as the crop was very backward. On the whole the conditions were favourable at the beginning and end of the season, but the prolonged drought in the middle of the season caused considerable injury to the crops on dry lands.

In the North-West Frontier Province, on the whole the season was a favourable one. Conditions of the weather were very similar to that in the Panjab. The crop came to maturity in a good healthy condition, but the quality of the grain was damaged to some extent when it was lying on the threshing-floor by the heavy rains of April and May.

In the United Provinces rainfall in September and October was favourable for the preparation of fields; moisture in the soil was sufficient; and the seed germinated freely. After this the season was unusually dry and irrigation was resorted to on a large scale. November and December were entirely rainless and were followed by severe frost. The rain in the last week of January was pretty general and greatly benefited the unirrigated crop. February and March were also practically rainless and the crop was gathered without any mishap, though in the western divisions white ants, frost, and dry west winds caused some damage.

In Bengal the rainfall in September was general and plentiful, but it was seriously deficient in October, there being practically no rain in south Bihar and Chota Nagpur. The fall in the subsequent months was markedly deficient in Bihar, and in a lesser degree elsewhere. On the whole the season was unfavourable to the wheat crop.

In the Central Provinces the monsoon rainfall was favourable for the preparation of land. In the southern districts, however, the monsoon ceased extraordinarily early in September and consequently the area sown was contracted, whilst the early growth of the plants was stunted. Prospects were gloomy, but were much improved by some good cold weather showers. In the northern districts the season was throughout favourable owing to the late monsoon rainfall and an exceptionally heavy fall at the end of October. Consequently the area sown showed a substantial increase. The cold weather showers were also exceptionally good and beneficial. In these districts the crop was the best reaped during the past ten years; and, but for some damage by frost and insects, would have been a heavy bumper crop.

In Berar the area was contracted owing to the repeated failure of the late rains during the past few years which made cultivators fear to reserve much land for winter sowings. The

1902-03

WHEAT

rainfall during the year was up to the average, and the exceptionally good showers in November and December greatly benefited the growth of the plants, and raised the yield above that of the previous year, although a contracted area was sown.

In Bombay the season was very good in Gujarat; in the Deccan and Karnatak the crop was somewhat damaged by heavy rain in December, and in Sind it suffered from a poor inundation. For the province generally the season was above the average. The monsoon was late, beginning in the second week of July. Some of the early crops were lost and had to be resown. August rain was sufficient and September rain was very good. The October rain was below the average, but in November heavy widespread rain was of great benefit to the young crop. An unusually heavy fall in December injured the crop in places.

In Hyderabad area was contracted, but the outturn was satisfactory.

In Rajputana there was a substantial increase in both area and yield. In Central India the area did not reach the figures of last year which showed a large increase over those of the year previous and the quinquennial average, but the yield was as good or better.

In Mysore both area and yield were substantially larger than those of the preceding year and the average.

1903-04

In the Panjab conditions were distinctly favourable from the beginning to the end of the season. The crop was also unquestionably a bumper one and the straw was as good as the grain. A serious misfortune which calls for special notice is the particularly virulent outbreak of plague which visited the new Jhelum colony. In consequence of this a large proportion of the new settlers fled to their old homes, abandoning a large area of splendid wheat which was left to rot on the ground.

In the North-West Frontier Province copious and well distributed monsoon rains facilitated the preparation of an unusually large area for wheat sowings, and the heavy rain in December and January enabled the cultivators to make extensive late sowings on unirrigated lands. February was fair and favourable for growth. Heavy and opportune rain was received in all districts throughout March and an unusually large proportion of an unusually large area was brought to maturity. The yield all round was said to be the best within living memory.

In the United Provinces owing to the heavy and continuous rain at the close of the monsoon, which spoiled much of the value of the early tillage, the crop was sown rather late, with inferior tillage and excessive moisture in the ground. From sowing time onwards, however, the season was, on the whole, remarkably favourable, the deficiency of the winter rains being largely made up by artificial irrigation. The cloudy weather at the end of February and the beginning of March induced a rapid spread of rust, but it came too late to do serious harm. The quality of the grain was good except in a few localities where the crop suffered from drought or strong winds.

In Bengal the heavy rains in October favoured the retention of moisture by the soil during the wheat-growing season. In November light showers were obtained all over the province, except in Bihar where the bulk of the wheat crop is raised. December was practically rainless, but the crop in Bihar was much benefited by the January rains. In February the rainfall was more general and copious. On the whole, the season was generally favourable.

In the Central Provinces and Berar an extended area was sown with wheat. The crop was, however, affected by the absence of winter rains. The heavy rain which fell at the end of February and the beginning of March and which was in some localities accompanied by severe hailstorms caused further deterioration, especially in the Berar districts. This deficiency in the weather conditions was, however, made up by the increased area sown.

In Bombay the area under wheat increased in most districts owing to favourable rains at sowing time in the Presidency proper and to a plentiful water-supply in Sind. The season was good in Sind and Gujarat. In the Deccan the crop suffered from deficiency of moisture, and from locusts and rats in places. In the Karnatak late rains were excessive and much damage was done by rust. For the province generally the season was fairly good.

In Hyderabad an increased area was sown, and a very good crop harvested, although damage was done by heavy rains in places.

In Rajputana both area and yield showed a very marked increase over the preceding year.

In Central India both area and yield increased substantially over the figures of the preceding year and the average.

In Mysore also both area and yield was substantially larger than those of the preceding year and the average.

1904-05

In the Panjab conditions of the rainfall were ideal except in a few central districts, but the crop received a serious check everywhere from the abnormally severe frosts which were experienced in the last week of January and the first week of February. Palpable harm was done to all early sown and advanced crops. Fortunately, however, favourable rainfall and sunshine soon changed the situation; and, on the whole, the effect of the frost was to retard harvesting

operations by two or three weeks and to convert what would have been a bumper crop into one a little above the normal.

In the North-West Frontier Province conditions were similar to those in the Panjab.

In the United Provinces conditions were everywhere most promising till the end of December, but the rest of the season proved disastrous. Owing to frosts of unprecedented severity and rust brought on by damp and cloudy weather enormous damage was done especially in the southern and central districts.

In Bengal the rainfall of October was very favourable throughout the wheat districts. Drought prevailed since then until January when rainfall was again general. But in February and March frost, rain, and hail, did considerable damage in Bihar where the bulk of the crop is grown. On the whole the season was unfavourable.

In the Central Provinces and Berar rainfall was favourable at sowing time and an extended area was placed under the crop. The crop was affected by the frost of January and February in the northern districts, but fortunately the damage was serious only in Saugor. Cloudy weather accompanied by rain storms in the end of February and beginning of March caused the appearance of rust in several districts, but the disease was severe in Jubbulpur only. The southern districts, however, fared much better than the northern, while the winter rains were less favourable in Berar than in the other districts.

In Bombay the area was curtailed in most places owing generally to insufficient sowing rains in the Presidency proper and to low inundation in Sind. The crop suffered through deficiency of moisture everywhere except in Kaira, Cutch, and Dharwar. The severe cold and frost of January-February further injured the crop particularly in Sind, Gujarat, and parts of the Deccan.

In Hyderabad the area sown was very nearly equal to that of the preceding year, but owing to deficient winter rains the yield was much less.

In Rajputana the area was a little below that of the preceding year, but the yield was proportionately much worse.

In Central India the yield showed a decrease, though the area sown was substantially larger than in the preceding year.

In Mysore there was a slight decrease in the area sown, but the yield was considerably below that of the preceding year.

WHEAT

COTTON

In the Panjab the season was very unfavourable. The winter rains, which had been beneficial, were followed by a long drought, and the monsoon held off until the end of July when rain was excessive. These conditions and locusts caused injury to both the early sowings and the late crop.

In the United Provinces the weather conditions were the same as in the Panjab, with a worse result.

In the Central Provinces the season was also unfavourable; the monsoon broke exceedingly late, and then rain was heavy and continuous, injuring the crop on low land.

In Bombay the season was bad, rain was excessive in Gujarat, and late and deficient in the south Deccan and Karnatak. In Sind the overflow of the Indus was also late and irregular.

In Madras the rains failed almost entirely during the sowing season. In the southern districts extended sowings were made of the late crop, but excessive rain later in the season injured it.

1891-92

In the Panjab the rains were again late and sowings were greatly restricted on unirrigated lands in the east and north-east of the province. An inadequate inundation had a similar effect on irrigated land in the west. The monsoon though late was copious, and floods injured the early sowings.

Similar conditions prevailed in the United Provinces.

In the Central Provinces excessive and injurious rain fell in September and October.

In Berar the season was generally good when sowings were made, but excessive rain in September and October injured the crop.

In Bombay the condition of the crop in Gujarat was greatly impaired by excessive rain in September. In the Karnatak a greater extent of land than usual was placed under food-grains as a result of the scarcity of the preceding seasons, and the area under cotton was in consequence smaller than the average. In the Deccan rain was exceptionally favourable for sowing and the area was increased. In Sind sowings were restricted owing to deficient water-supply and late inundation.

In Madras serious injury resulted from a very deficient rainfall in the north-east monsoon.

1892-93

COTTON
1893-94

In the Panjab the season was favourable, though some injury was caused by heavy floods in July.

In the United Provinces continued heavy rain from July to October, and strong winds retarded weeding operations and greatly injured the crop.

Excessive rain restricted sowings in Bengal, while in Orissa the same result was due to insufficient rain.

In Bombay rain in November affected the crop. The late crop, owing to favourable rain at sowing, covered a large area both in the Presidency proper and in Sind, but afterwards excessive rain reduced the yield.

In the Central Provinces and Berar excessive rain in November reduced the expectations of a full to a fair crop.

In Madras the season was favourable. The late crop covered a large area, but conditions after sowing were unfavourable by reason of excessive rain and cloudy weather.

1894-95

In the Panjab the area under cotton, although, owing to rain and floods, less than originally anticipated, was extraordinarily large; the monsoon was capricious, but on the whole very beneficial.

In the United Provinces, on the other hand, the area was slightly below the average and heavy rain and stormy winds in October and November reduced the yield.

In Bengal, owing to excessive rain, the area of the early crop was below the average and the crop was affected by the late rains which interfered also with the sowing of the late crop. The weather which followed, however, was on the whole favourable.

In the Central Provinces and Berar the rains were heavy and injured the standing crop.

In Bombay the rain was excessive in Gujarat and deficient in the Deccan; clouds in the north and disease in the south caused further injury.

In Madras there was a restriction in the area sown with the early and late crops due, in the northern and Deccan districts, to the fact that lands usually sown with cotton were placed under other crops, and in the southern districts mainly to the want of timely rains.

1895-96

In the Panjab the season commenced well, but after July the rainfall was generally insufficient and untimely, with the result that on irrigated land the crop was good, but poor on land dependent entirely on rain.

In the United Provinces the rains were generally favourable to the crop, weeding operations were properly carried out, and an excellent crop was expected; but the rainfall at the end of the season proved very scanty, and insufficient moisture arrested the development of the plant. The yield, however, was on the whole good.

In Bengal the late sowings suffered from want of rain in October at sowing time, but the crop was benefited by favourable weather later.

In the Central Provinces the deficiency of rain in the later months of the monsoon favoured the crop which was particularly good.

In Berar also the scantier rainfall was beneficial to the crop.

In Bombay the absence of reasonable rain for sowing, and a long break in the rains in August, restricted sowings of early cotton. The area sown with the late crop was also below the average owing to deficiency of seasonable rain. The season was, however, on the whole better than in the preceding year. In Sind there was a deficiency of water.

In Madras the area sown was a little larger than the average owing to the favourable character of the season, but the yield was estimated to be below the average.

1896-97

In the Panjab no rain having fallen in April, sowings were greatly contracted on unirrigated land, though extensive sowings were made on irrigated areas. But the monsoon brought little rain and it ceased early; the harvest therefore depended on irrigation which was inadequate and the crop was bad.

In the United Provinces there was sufficient rain and the crop was in good condition until the middle of August. Thereafter drought, with dry west winds, injured the crop especially on unirrigated lands.

In Bengal the season was unfavourable, and the crop suffered from deficient rain and the early withdrawal of the monsoon.

In the Central Provinces the rainfall in September in many districts was very light and local. October was rainless, and the plants did not bloom freely.

In Berar there was seasonable rain at sowing time, and a large area was sown, but the yield was very poor owing to the failure of the monsoon after August.

In Bombay the season was on the whole unfavourable, large tracts remaining unsown owing to drought and deficient rain in places. The drought continued more or less from the middle of August and seriously affected the crop, except in Gujarat and Sind where the season was fairly good.

In Madras also the crop suffered greatly from deficient rainfall, and in places from excessive rain.

In Hyderabad a restricted area was sown, and the crop was poor.

In the Panjab sowings were restricted owing to insufficient rain and the replacement of cotton by food-grains. The yield on the restricted area was above the average.

In the United Provinces of Agra and Oudh the monsoon commenced late and the crop on low lands suffered from excessive rain; but on the whole the condition and quality of the crop were good.

In Bengal the season was on the whole favourable.

In the Central Provinces excessive and continuous rain in September and October injured the crop.

In Berar the season, though a little late, was on the whole favourable.

In Bombay the yield of both early and late crops was materially smaller than the average. The prospects of the crop were good until December, when it suffered from blight and locusts in many places. In Sind also the yield was comparatively small, the conditions of the season leaving much to be desired.

In Madras the rainfall was seasonable and sufficient, and an extended area was sown in the districts growing *Northern* and *Western* varieties, but the lateness of the monsoon contracted the area in places where *Tinnerelly* and *Salem* cotton is grown. The crop was injured by blight or drought in some of the principal cotton-growing districts.

In Hyderabad the area sown was large, but owing to an unfavourable season, the yield was bad.

In the Panjab the rainfall at sowing time was scanty, in August it was irregular and deficient, but favourable showers in September did much to develop and mature the crop. Irrigation was also late and insufficient, and sowings on irrigated lands were in consequence greatly restricted.

In the United Provinces the season was on the whole favourable, although there was excessive rain in parts. The dry weather in October benefited the crop.

In Bengal the season was unfavourable owing to the uneven character of the monsoon.

In the Central Provinces excessive rain at sowing time interrupted weeding operations in the northern districts, and in places insufficient rain caused defective germination. Drought followed in the autumn.

In Berar dry weather in October and the failure of the late rains had a bad effect, but the yield was good.

In Bombay the area under early cotton was increased in some places as a result of favourable rains and the rotation of crops, but that increase was almost counterbalanced by decreases in other places. The cultivation of cotton, especially in the Deccan and Karnatak, had not yet fully recovered from the check it received in 1897-98 by an unusually large sowing of food crops after the famine of 1896-97; and the late crop covered an area smaller than the average owing to unfavourable rains and to the substitution of other crops in place of cotton. The season was good until December, and though the crop afterwards suffered from cold and cloudy weather in Gujarat, adverse winds in the Karnatak, and frost in Sind, the yield was abundant.

In Madras, owing partly to the unfavourable season in the Deccan districts and partly to the low price of cotton, a reduced area was sown, and the yield was very small.

In Hyderabad the monsoon was late at the commencement of the season, and though prospects were improved by rain in August and September, the yield was bad.

In Rajputana the season was on the whole unfavourable owing to insufficient rain; in Central India the crop did well.

In the Panjab the prospects of the crop were generally hopeful in the beginning of the season, and sufficient rain at sowing time and a good supply of canal water induced cultivators to sow an extensive area, a large proportion being on land irrigated by canals and wells. But with the holding off of rain in August and September the condition of the crop deteriorated, and the yield was poor.

In the United Provinces excessive rain in June and July interfered with sowings and was also injurious to the young plant. Thereafter the absence of rain was even more injurious, especially in unirrigated tracts where the crop was almost entirely lost.

In Bengal, in the early part of the season, the rainfall was irregularly distributed, and later it was on the whole inadequate, and the yield of the crop, both early and late, was not good.

In the Central Provinces the season was one of very exceptional drought, and the plants suffered not only from want of rain, but from abnormal and scorching heat.

In Berar the season was so unfavourable as to be little short of disastrous. The rainfall was deficient at the sowing season, and the subsequent drought in July prevented later sowings. The late rains also entirely failed, and with them the crop.

In Bombay the season was extremely unfavourable to the early crop, and though it was relieved here and there by partial showers in August and September, it completely failed in most places. The late sown crop also withered in many places, and where it survived gave a very poor yield. In Sind the water-supply was deficient and the yield poor.

In Madras the season was, on the whole, unfavourable and the yield very poor.

In Hyderabad the monsoon, which promised to be favourable at the commencement of the season, failed in July and August. There was some rain in the beginning of

1898-99

1899-1900

COTTON

September, but the continuance of the drought after the middle of September told heavily on the crop.

In Central India and Rajputana the conditions of the season resembled those of Bombay and Berar, and their effect on the cotton crop was quite as bad.

1900-01

In the Panjab the largest area yet reported was sown, about 75 per cent on irrigated land. But the crop suffered greatly in some districts from insects, and the heavy monsoon rains also retarded growth.

In the United Provinces the monsoon commenced late, and though in June some thunderstorms gave heavy local falls in places, hot and dry weather continued until the beginning of July over the greater part of the provinces. The rain continued to be deficient and unevenly distributed until the last week of August when excellent rain was received and the fall in September was generally in excess of the average. Thereafter the weather continued generally favourable. A good yield in quantity and quality was the result.

In Bengal the rain in July was, on the whole, well distributed and fairly continuous. In August it was deficient and irregularly distributed. Much more copious and general rain fell in September, but in October it was deficient. The season was, on the whole, unfavourable to early cotton, though fairly favourable to the late cotton except at sowing time.

In the Central Provinces, in consequence of the relative cheapness of cotton seed, favourable conditions at sowing time, and good prices, a very extensive area was sown. The distribution of the rainfall left something to be desired. In some parts the plants were swamped by the heavy and continuous rain of August and September, especially in the richer soils and in low-lying positions. Heavy rain in September also injured the flowers, and the absence of rain in October affected the crop in poor soils and high-lying fields, and owing to insufficient moisture the bolls withered before maturity.

In Berar the area under cotton was the largest known. The monsoon rainfall was better than for many years past. The early rains were somewhat deferred and sowings were later than usual, but the fall in June and July was normal; August was very wet and in September also the fall was excessive; but the rains closed abruptly at the end of that month. The cotton crop on poor soils suffered from lack of moisture, but on all rich black soils and in low-lying lands there was a heavy crop.

In Bombay early cotton in the Deccan and late cotton elsewhere, mainly in Gujarat, covered a restricted area, early rains being deficient and not allowing full sowings. The devotion of part of the usual cotton area to food-grains consequent on the scarcity of the preceding year also accounts for some of the decrease. The crop promised well at first, but afterwards it suffered from the deficiency of the late rains.

In Madras the north-east monsoon failed in some places and the area sown was also restricted by the preference given to the cultivation of food-grains. The crop was generally fair except in the Deccan districts, where *Northerns* and *Westerns* were affected by disease and want of rain.

In Hyderabad with good rain at the sowing season for early cotton a large area was brought under cultivation, but late cotton did not receive sufficient rain; and in the Aurangabad division, which has the largest cotton area in the territory, the sudden cessation of the winter rains kept the crop back.

In Central India both area and yield were much in excess of the average.

In Burma heavy rains greatly injured the crop.

1901-02

In the Panjab the rainfall of May was beneficial to the crop, and the injurious effect of the long break in the rains in September and October was chiefly felt on unirrigated land. Some damage was also done by locusts, grasshoppers, and rats.

In the United Provinces a very large area—the largest since 1884—was placed under cotton, although the rains were late, owing to the stimulus given by the high prices and the plentiful crop of the preceding year.

In Bengal the season was on the whole unfavourable by reason of deficient rain for the cotton crop, both early and late.

In the Central Provinces the germination of the crop, which was not sown under favourable conditions, was unequal, and a long break of the rains in the first-half of July necessitated resowings to some extent in most of the important cotton-growing districts. Excessive rain in August did some injury which was not altogether made good by a timely break in the second-half of September. Owing to the absence of rain after September, and the ravages of insects in October, the prospects of the crop materially deteriorated.

In Berar the monsoon rainfall was unusually heavy and continuous. It was not until the beginning of September that a break of any duration occurred and the crop then was suffering from excessive moisture; but three weeks of fine weather followed by timely showers brightened prospects considerably; and the clear cold weather of November and December brought the crop rapidly to maturity. Rats, however, caused much injury.

In Bombay there was some increase in the area sown with early and late cotton in the British districts of Gujarat and the Deccan, and in Baroda and some other Gujarat States,

owing to favourable early rains, but not enough to compensate for the large decline in Káthiáwár and Cutch and in the Karnátak districts, which resulted from the deficiency of rain at the sowing season. In Sind there was a small increase due to a better water-supply. In Gujarat the season began well, but the crop made little progress owing to the failure of the late rains. Afterwards locusts and rats materially injured the surviving crops.

In Madras the condition and prospects of the crop were, on the whole, fair, and unusually late rain in the Deccan districts considerably improved prospects there. On the other hand, late and subsequently very heavy rain retarded sowings in the south; both the area and the yield were, on the whole, below the average.

In Hyderabad the rains were, on the whole, favourable.

In Central India and Rajputana the crop was good.

In Burma the season was not favourable owing to want of rain.

COTTON.

In the Panjab, owing to deficient rainfall in February and March, unirrigated cotton sowings contracted. The deficiency of rainfall, however, stimulated cultivation with the aid of irrigation. The rainfall of June was favourable for late sowings on unirrigated lands. The break in the rains towards the close of July and August marred the prospects a good deal and the flowers did not form well. September rains, however, improved the crop very much, but the flowers that formed then were late and the cold of the last few weeks checked further development.

1902-03

In the North-West Frontier Province timely rainfall from March to June stimulated sowings and proved exceedingly beneficial to the young plants, and the seasonable rains of July, August, and September enabled further sowings to be made. The crop was fairly average.

In the United Provinces owing to a succession of seasons of light rainfall, which generally tends to the success of this crop, the cultivation of cotton extended. Prospects, however, deteriorated, afterwards. In places the flowers fell off without bearing bolls, while in others the full development of the bolls was checked. Damage was also reported in places from high winds and insects. The irrigated early crop escaped serious injury, but the unirrigated late crop suffered severely.

In Bengal owing to insufficient and ill-distributed rainfall the season was anything but favourable to the early crop. For the late crop also the season was not favourable owing to deficient rain.

In the Central Provinces, sowings, though late, were successful over an exceptionally large area. Germination was good, the weather was favourable for weeding, and the plants thrived. Since then the season was not so favourable. In the northern districts heavy rain in October and November did considerable damage just when the plants were in flower, and in the southern districts, the plants suffered in their later stages of growth from drought accompanied by cloudy weather, which caused the withering of immature bolls. Damage was also caused by insects. The season did not thus fulfil its early promise of being an exceptionally favourable one; but it was still about the average.

In Berar the exceptionally good crops of the preceding two seasons and the favourable market prices influenced the cultivators to sow cotton extensively. The monsoon rains commenced unusually late and there was an extensive break in August which caused some anxiety; subsequently the rainfall was light but timely, and prospects were brilliant. Unfortunately heavy rain in November caused considerable damage to the ripe cotton, and in some districts knocked ripening bolls off the plants. But, although the late rains damaged the crop that had reached maturity, a heavier yield than usual was gathered from the later pickings.

In Bombay the area contracted mainly in the British districts of Gujarat and the Deccan, where the opening rains came much later than usual. In the Gujarat States, however, there was a considerable extension in area which made up part of the deficit elsewhere. Though the crop suffered in places from excessive rain and cold at the time of the opening of the bolls, the season was distinctly favourable.

In Madras an extended area was sown owing to good and timely rainfall; and the condition of the crop was reported to be generally good.

In Hyderabad the crop was unfavourably affected in the Mahratwara districts, where most of the cotton is grown, by cloudy weather and untimely rain that fell when the cotton capsules were growing, and in Bidar the capsules fell off in parts.

In Rajputana and Central India the area exceeded the average and the crop was excellent.

In Burma also the crop was very good.

In the Panjab, the late spring rains were favourable for sowing throughout the central and north Panjab, with the result that the increase in the area sown in these parts of the province more than compensated for the deficiency in the Delhi division due to the late arrival of the monsoon rains. The outturn was also considerably below the average in the dry area of the Delhi division. Taking the rest of the province as a whole, the late rains caused late flowering, and excessive rains in some districts was also prejudicial to the yield. A few districts also reported high winds at flowering time. But conditions were fairly satisfactory in the most important districts of the province.

1903-04

COTTON

In the North-West Frontier Province the heavy rainfall of March afforded sufficient moisture for cotton sowings. The rainfall of May helped on the crop and that of July improved prospects.

In the United Provinces a relatively small area was sown owing to the late arrival of the monsoon. The rainfall was favourable up to the end of September, when the crop, though backward, was doing fairly well. The excessive rain in October and the strong winds that prevailed changed the whole prospect. In a few western districts, which escaped the full severity of the storm, the crop was comparatively good; elsewhere it was little more than half the normal.

In Bengal the defective rainfall in the early part of the season was, on the whole, favourable to the early cotton crop, except where the rainfall was altogether insufficient in May. In the flowering season, that is, in September and October, the rainfall was generally in excess, and consequently the production was low in most districts. For the late crop also the season was not altogether favourable as the rainfall was generally insufficient.

In the Central Provinces the crop was put down under favourable conditions. Germination was good and very little resowing was necessary. The heavy and continuous rainfall in August and September, however, retarded weeding operations and checked the growth of the plants, while the continuance of rainy weather in October not only prevented this injury being repaired, but also increased the damage from excessive moisture in some of the most important cotton growing districts. Some damage was also caused by grasshoppers in parts of Nimar and Chhindwara. The prospects of the crop therefore materially deteriorated.

In Berar favourable seasons and good prices greatly encouraged the cultivation of cotton and a record area was sown. But the damage caused by heavy rain was reported to be greater here than in the Central Provinces.

In Bombay (including Sind) favourable rains at sowing time extended the area sown almost everywhere. The crop progressed well at first, but later on it suffered from deficiency of moisture in North Gujarat and through its excess in the south. Injury was also caused by locusts in Gujarat and by disease in parts of the Karnatak. On the whole, however, the crop fared well everywhere.

In Madras there was an expansion of the area sown owing to good and timely rainfall. The condition of the crop was reported to be generally good.

In Hyderabad the area sown showed an increase over the preceding record year; but the crop was affected by heavy rain, especially in the western districts. In the southern districts where a large portion of the crop is sown late the crop was better.

In Rajputana, owing to the lateness of the sowing rains, a restricted area was sown. The crop was also damaged by locusts and high winds in places.

In Central India an extended area was sown, and the yield also was well above the preceding year, though the crop suffered considerably from rain in places.

In Burma the early rains generally were scanty, and the later rains somewhat in excess. But fortunately the destruction due to the August drought and the heavy rainfall of October extended to a limited area only and did not appreciably affect the total outturn.

In Assam the crop suffered seriously from drought in March and April. Since then the weather proved generally favourable.

In Ajmer-Merwara rains ceased early after the middle of September, and the crop was injured by locusts and cold winds.

1904-05

In the Panjab there was an extension of cultivation, especially in the Delhi Division; owing to sufficient rainfall at sowing time. The unirrigated crop suffered severely from the failure of the monsoon in the central Panjab. On the whole, however, the yield was fully up to the average, and above the average in many districts.

In the North-West Frontier Province also the heavy rains of March enabled the cultivators to make extensive sowings in April and May. In the succeeding months, from June to October, the rainfall was well distributed and sufficient in all the districts, except Dera Ismail Khan, where it was deficient and affected the crop to a great extent.

In the United Provinces the very large decrease, which took place in 1903-04 in the cultivation of cotton owing to the late arrival of the monsoon, was nearly made up in 1904-05 owing to favourable and sufficient sowing rains in most places. The crop suffered from excessive rain in the Allahabad Division, but in the other cotton growing tracts conditions were satisfactory.

In Bengal the season was unfavourable for the early cotton crop, which suffered from heavy rain in some districts and from want of moisture in others. For the late crop also the season, on the whole, was not favourable the rainfall being ill-distributed, and insufficient in many places.

In the Central Provinces and Berar the sowing season though somewhat late was on the whole favourable and an extended area was sown. Germination was good and the light rainfall during the early monsoon facilitated weeding. Owing to long break in July and the latter part of August, the plants on light soil were stunted, but good rain fell before serious damage had occurred and the plants affected by drought recovered to a great extent. Some damage was done to the crop in places by rain in October when flowers were opening and also

by locusts and other insects, the damage being reported to be greater in Berar than in the other districts.

COTTON

In Bombay there was a decrease in the area sown in the Deccan, Karnatak, Kathiawar and Cutch due to the shortness of early sowing rains. On the other hand, in the British districts of Gujarat, and also in Sind and Baroda, the cultivation was considerably extended, partly under the stimulus of the high prices of the preceding year and partly in the hope that cotton would be more likely to succeed in a season of deficient rainfall than other crops. The crop, however, suffered everywhere in the Presidency proper through deficiency of moisture, and in places from excessive cold and disease. In Sind the crop was fair.

In Madras an extended area was placed under the crop owing partly to timely rainfall and partly to the good prices obtained in the preceding year. The crop, however, suffered seriously from want of rain.

In Hyderabad owing to favourable conditions of the season both the area and the yield slightly exceeded those of the preceding year.

In Rajputana, Ajmer-Merwara, and Central India an extended area was sown and heavy yield obtained.

In Burma the rains began well and continued favourable till towards the end of season, in October, when they were unusually heavy and did a good deal of damage to the crop.

In Assam the season was generally favourable and a better yield than that of the preceding year was obtained.

In Mysore both the area and the yield were considerably larger than in the preceding year.

OILSEEDS*Linseed, rape, and mustard*

In the Panjab the season was fairly good for oilseeds, and the area was the largest on record up to that year, but the yield disappointed expectation. 1891-92

In the United Provinces the season was mild and favourable to linseed, and the rapeseed was free from fungoid disease: both crops, however, suffered to some extent from the lateness of the winter rains.

In Bengal the dryness of the season affected the crops, and reduced the areas considerably in most districts.

In the Central Provinces and Berar the season was on the whole favourable. In the former linseed suffered from the failure of the winter rains; while in the latter rain at sowing time was favourable, but the late rain was scanty.

In Bombay, though a large area was sown with linseed in the North Deccan, the crop was everywhere poor owing to deficient rain, and in the Karnatak it was a complete failure from drought. The rapeseed crop in Gujarat and Sind was also injured by the dryness of the season, and the yield was very deficient.

In the Panjab where the oilseeds mature late, the winter rains were followed by a large increase in the area sown. 1892-93

In the United Provinces the expectations of a good crop were not realised owing to frost and wet weather in January and February.

In Bengal the rain in September and October was in defect, which was partially remedied by copious rain about the end of October and in November. The winter rains from January to March were excessive and continuous, and injured the crop.

In the Central Provinces timely rain in October led to a large expansion in the area under linseed, and although injury was caused by frost, the yield was good.

In Berar heavy rain in October retarded sowings of linseed, and hail in January blighted the crop.

In Bombay the crop suffered from excess of moisture after heavy rain in September and October. But on the whole both linseed and rapeseed did well.

In Assam the season was favourable.

In the Panjab the season, first favourable, changed for the worse when heavy rain in February and March injured the crop and generated insect pests. The crop was, however, on the whole fair. 1893-94

In the United Provinces the area sown with rape and linseed was seriously reduced by excessive rainfall, and the crop suffered from rust and insects following on continued wet in the spring.

In Bengal also sowings were impeded by excessive rain. The crop was afterwards seriously affected by the failure of the cold weather rains, and a wet March injured rape and mustard in many districts.

OILSEEDS

In the Central Provinces the crop promised well in the earlier months, but heavy rain, shortly after sowing, damaged the seedlings. Cloudy weather continued, rust set in, and much injury was done, but nevertheless the yield was much good.

In Berar the sowing of linseed was late owing to heavy rain in October and November. The crop was much affected by untimely rain and rust.

In Bombay seasonable rain stimulated sowings of linseed, both area and yield being good. In Sind rapeseed suffered from insufficient water-supply, blight, and frost.

In Hyderabad excessive rain caused a contraction in places of the area sown, while in others timely rainfall promoted sowings.

In Assam the season was favourable for mustard.

1894-95

In the Panjab the area sown was contracted owing to deficient rainfall at the time of sowing; and excessive rain injured the crop in the submontane districts.

In the United Provinces the linseed and rapeseed crops were injured by excessive moisture and by fungoid disease.

In Bengal sowings were somewhat restricted owing to the prolonged monsoon rain, and the crop was injured by the absence of rain from November until the middle of January.

In the Central Provinces untimely rain and cloudy weather throughout the winter caused damage to the crop. Insects attacked it, rust set in, and the crop was practically ruined.

In Berar the unusual prevalence of cloudy weather, and afterwards storms and winds, deteriorated the linseed crop. Rust set in, and the yield was poor.

In Bombay excessive moisture affected the area sown with linseed, and blight injured the crop. In Sind an extended area was sown with rapeseed owing to favourable floods; but the yield was not proportionate to the increase in the area.

In Hyderabad the winter rains injured the crop.

The area under mustard in Assam was small and the yield inferior owing to the unfavourable character of the season.

1895-96

The season generally, in the provinces in which linseed, rapeseed, and mustard are largely grown, was marked by scanty monsoon rains, which ceased much earlier than usual, and by an almost entire failure of the winter rains. The conditions, which were very unfavourable for wheat, were less so for the oilseeds in Bengal, Bombay, Berar, and Hyderabad, but were quite bad in the Panjab, Sind, the United Provinces and the Central Provinces.

The yield of linseed was much below the average, though larger than that of 1894-95 when the harvest was injuriously affected by prolonged wet. The area sown was restricted in Northern India by the dryness of the soil; but this dryness led to an expansion in the sowing of linseed in Bombay and Berar, much land considered too dry for wheat having been placed under linseed.

The area under rapeseed, on the other hand, was more or less contracted everywhere except in Hyderabad and the contraction was very material in the Panjab, the United Provinces, Bombay, and Sind. The harvest, however, was good on the reduced area in the United Provinces, and in Bengal it was not much below the average; so that although the yield was very poor in the Panjab, Sind, and Bombay, the general result was a good crop.

In Assam the season was somewhat more favourable than in 1894-95 in the lower districts but in Upper Assam it suffered much from want of rain.

1896-97

The monsoon suddenly withdrew in the middle of August, and the drought which followed prevented extensive sowings. In northern India the winter rains were timely and sufficient and of great benefit, but they, like the monsoon rains, failed in Central and Western India where the crops suffered severely.

The area sown with linseed was greatly contracted in the United Provinces, the Central Provinces, Bombay, and Berar owing to want of moisture in the soil at sowing time. The yield was also bad, especially in the Central Provinces and Berar, while in Bombay the crop almost entirely failed. In Bengal and the United Provinces the crop was better, having been greatly benefited by the winter rains.

The area under rape and mustard was larger than in 1895-96 in the Panjab, Bombay, and Sind, but was somewhat restricted in Bengal and the United Provinces. The harvest was generally fair. The short rainfall in Assam was unfavourable for sowing mustard and the yield was affected by the absence of rain during the period of growth.

1897-98

Conditions in the Panjab, the United Provinces, and Bengal were generally favourable, and although the area sown was restricted, except in the Panjab, the yield of rapeseed was increased, the yield was good.

The conditions in Central and Western India were generally unfavourable, the area sown was greatly contracted, and the yield deficient in proportion to the area sown, but did better in Bombay and Sind.

The mustard crop in Bengal and Assam was reduced in consequence of the deficient winter rains.

In the Panjab the season was very unfavourable for rapeseed, insufficient rain at sowing time and drought when the crop was maturing doing great damage.

In the United Provinces excessive moisture at sowing time and the substitution of food-grains for other crops, led to a contraction in the area under linseed and rapeseed. The winter rain, however, was seasonable, and though rapeseed was injured by frost in places, both crops on the whole did fairly well.

In Bengal the conditions of the season were generally favourable, the moisture in the soil from the autumn rain, and the silt in many places from the early subsidence of the floods in September, being beneficial to the crop.

In Assam the sowing of mustard was restricted owing to the late subsidence of the floods, and the yield was very small.

In the Central Provinces the young plants on the lighter soils and on slopes withered in the drought and heat of November and December; and injury was caused by frost and cloudy weather on low-lying lands in some of the northern districts.

In Berar the monsoon was favourable and sowings were conducted under seasonable conditions; but the crop suffered from the failure of the late rains.

In Bombay sowings of linseed were restricted, owing partly to the cultivation of other crops and partly to the unfavourable character of the season. In Khandesh the rain at sowing time was seasonable and sufficient, and in Dharwar it was excessive; but elsewhere in the Deccan and the Karnatak the late rains were insufficient and the crop suffered. It was also injured in places by wind and insects. Sowings of rapeseed were restricted in Native Gujarat (except in Baroda) in consequence of insufficient rain, but in the British districts sufficient moisture in the soil and favourable winter rains stimulated larger sowings.

In Sind, as the result of a low inundation, there was a very great contraction in the area under rapeseed. The crop was also injured by frost in some places.

In the Panjab the early cessation of the monsoon, the dry autumn months, and the lateness and deficiency of the winter rains, had the natural result of diminished sowings and restricted yield of rapeseed. In some places no yield at all was obtained, the crop having been cut when green and eaten as a vegetable by the people or given as fodder to the cattle.

1899-1900

In the United Provinces excessive rain in June and July was followed by a material deficiency in August and September, and the three following months were exceptionally dry; fortunately rain fell about the middle of January and did much good to both linseed and rapeseed.

In Bengal the season was not favourable to the cultivation of oilseeds. The rainfall in the autumn months was in defect, and the want of rain was felt in many districts at the time of sowing, while an excess in others interfered with the proper germination of the seeds. The usefulness of the rain which fell in January was qualified by the injury done in some places by hail.

In Assam the late subsidence of the floods, combined with the late cessation of the rains, interfered with timely sowings, but the yield was good owing to favourable weather after the crop was sown.

In the Central Provinces, the want of moisture in the soil at sowing time, and the absence of the winter rains, told upon linseed seriously. Germination was exceedingly defective, and the plants which came up yielded but little seed.

In Berar also linseed was a disastrous failure. Even the best black soil failed to retain enough moisture to nourish the crop, and the plants withered before reaching maturity.

In Bombay linseed was a complete failure in Gujarat, no sowings being possible in consequence of the failure of the rains. In the Deccan and other parts of the Presidency, the conditions were hardly better. The rapeseed crop was also practically a complete failure, some return having been obtained only in Cutch.

In Hyderabad which is subject to climatic conditions resembling those of Berar and Bombay, linseed, rapeseed, and mustard all did very badly.

In the Panjab the season was most favourable for rapeseed. The monsoon rains were abundant and the winter rains fell at opportune intervals, both for sowing and maturing. The area under the seed was more than double the average, and the yield very large.

1900-01

In the United Provinces the moisture in the soil was ample at the sowing season, and consequently the area sown was extended. But the excessive and prolonged continuance of the rain and cloudy weather generated fungoid diseases, and the crop was seriously affected by them in many districts, the yield in the localities affected being hardly more than half the normal crop.

In Bengal the monsoon rains were fitful and irregular, falling in abnormal quantity towards the end of the season, while the winter rain in January and February was also much in excess of the normal. On the whole the season was unfavourable to the oilseed crops, which suffered from an excess of rain in many districts and from comparative drought in others.

In Assam the mustard crop suffered in most districts from the absence of rain during the period of growth.

In the Central Provinces the continuous rain during August and September interfered with the preparation of land, whilst the absence of the usual October showers was unfavourable

OILSEEDS

to sowings in some districts. Germination was generally good, and except in Nagpur, prospects were favourable until the continued cloud and rain in January and February induced rust which caused great injury. The unfavourable conditions after January told seriously upon linseed.

In Berar the area sown with linseed was far below the average. After the year of famine during which both food-stocks and credit were exhausted, the general inclination of the cultivators was to obtain as early a crop as possible, and larger areas were devoted to the autumn crops, notably jawar and cotton. The monsoon rainfall was in excess of the average, but the ground had been so thoroughly parched by the failure of the rains of 1899 that the moisture was rapidly absorbed and was inadequate for the successful growth of linseed. No rain fell after sowings had been completed, the rain of January came too late to be of any material benefit, and the yield was poor.

In Bombay linseed is mostly grown in the Deccan and Karnatak, and in both tracts the crop suffered so greatly from the absence of moisture owing to scanty rain as to be an almost complete failure. Rapeseed did better in Gujarat, but this crop is of much more importance in Sind where the area sown was in excess of the average and a fair yield was harvested.

In Hyderabad an extensive area, not materially smaller than the average, was placed under linseed, but the conditions of the season were unfavourable, as in Berar.

1901-02

In the Panjab the monsoon rain ceased early and was not as abundant as usual. The winter rains failed entirely, and high winds and severe frosts in February proved detrimental to the crop, which was only saved from destruction in some places by slight showers in March. Owing to the absence of rain in the sowing season, a very small area was sown with oilseeds, while sources of artificial irrigation were devoted chiefly to superior crops. The crop on unirrigated lands gave extremely poor results generally and failed entirely in several localities. On irrigated lands also the crop was below the average.

In the North-West Frontier Province, as in the Panjab, the season was most unfavourable for rapeseed. There was a decline in the area sown owing to the failure of the winter rains and to the short supply of irrigation from canals and hill torrents.

In the United Provinces the autumn rains in the latter half of the season were insufficient in the Meerut division, and in parts of the Agra and Rohilkhand divisions; in the rest of the provinces conditions at seed-time were less unfavourable. The winter rains were scanty, only light rain having fallen towards the close of December and the beginning of January. Linseed is generally sown after an autumn crop, and, as the soil was too dry for sowing without previous irrigation, the area sown with this seed declined largely; but the area and yield of rapeseed were larger than the average.

In Bengal the monsoon was weak, the deficiency being serious in the Bihar and Chota Nagpur divisions. On the whole, the season was unfavourable for oilseeds, especially in Bihar; and there was a decline in the area sown owing to drought in the sowing season.

In Assam the season was favourable for the mustard crop except for heavy rain at the end of November. The area sown was larger than usual, and the yield was almost equal to the average.

In the Central Provinces the absence of moisture in the soil at the sowing season and the failure of the winter rains told seriously upon the linseed crop. Germination was defective and the plants which came up yielded but little seed.

In Berar there was no winter rain, but the season was favourable for sowing, and in most localities the seed germinated freely and prospects were good; but considerable injury was done by rats, and these prospects were not realised.

In Bombay the absence of moisture severely injured the linseed crop, and its ruin was completed by rats, which destroyed nine-tenths of the crop in Khandesh. As regards rapeseed, the conditions in Sind where the crop is mostly grown were fairly good, but in Gujarat the crop was almost a complete failure by reason of drought and the destructive activity of rats.

In Hyderabad the area was slightly smaller than the preceding year, but a little larger than the average. The yield was smaller than the average owing to the unfavourable character of the latter part of the monsoon.

1902-03

In the Panjab the late continuance of the monsoon was favourable for sowings, and an extensive area was sown; but the failure of the winter rains caused wide-spread injury, and though good rain fell from March 10th onwards, this was too late to benefit rapeseed to any considerable extent. Insects also did great harm in places.

In the North-West Frontier Province the season was on the whole favourable for the rapeseed crop. But considerable injury was done to the crop in Hazara and Kohat by heavy rains at harvest time which blackened the stalk and damaged the seed.

In the United Provinces the autumn rains were seasonable and there was sufficient moisture in the ground when the crops were sown. November and December were entirely rainless and were followed by severe frost. The first winter rains in the last week of January generally benefited the crops. After that there was practically no rain. As in the case of

wheat the dry season was very favourable to the oilseed crops, though in some districts in the west slight damage was reported from frosts and hot west winds.

In Bengal the monsoon rains were generally plentiful, but terminated abruptly in September. In that month there was good rain in Bihar and Chota Nagpur; in north Bengal the fall was greatly in excess of the normal, while elsewhere it was, on the whole, slightly in defect. October was unusually dry, and the following two months were practically rainless. The drought continued through January in Bihar and east Bengal, while elsewhere there were seasonable showers. General but scanty rain in February slightly benefited the crops. There was, however, very little rain during the next two months, except in a few districts of east Bengal, and on the whole the season was not favourable.

In Assam, the partial loss of the rice crop caused by floods induced people to sow mustard more largely than usual. But for want of rain during the season of growth and other unfavourable causes, the character of the crop was much below the average in many districts. The increased area sown, however, made up for the poor outturn of the crop.

In the Central Provinces the early cessation of the monsoon rainfall contracted sowings; germination was defective for want of moisture, and the crop which came up suffered from the continued drought. In the northern districts, where conditions were not unfavourable at sowing time, some damage was caused by frost and insects.

In Berar the decrease in the area sown was attributed to the repeated failure of the late rains during past years, which induced cultivators to allot more land under monsoon (*kharif*) crops. There were good showers in November and December which improved the outturn.

In Bombay there was a decline in the area sown with linseed in the Deccan and Karnatak and the crop was affected by rust and disease in places owing to excessive rain, and also from want of sufficient moisture. In Gujarat the crop was fairly good. As regards rapeseed, the crop in Gujarat suffered slightly from frost in Baroda; elsewhere it was fair. In Sind there was a decrease in area owing to low inundation; but the condition of the crop was fair.

In Hyderabad there was a temporary withholding of the rains at the commencement of the season, but the conditions afterwards turned very favourable.

In the Panjab owing to favourable conditions at sowing time an exceptionally large area was placed under rapeseed. The failure of the winter rains in the south-eastern districts seriously affected the crop. In all other districts conditions were favourable throughout; and the crop on the whole was a bumper one.

In the North-West Frontier Province conditions were unfavourable for sowing, except in Dera Ismael Khan where hill torrent irrigation was unusually favourable and allowed of an exceptionally large area being sown. The general rain at the end of December and in January were most beneficial to the crop. The rains during the subsequent months were ample and well distributed, and the crop came to maturity in an unusually good condition.

In the United Provinces moisture was excessive and in some places the crops were sown late. Linseed is generally sown after an autumn crop, and as moisture was ample a very large area was devoted to its cultivation. The area under rapeseed, however, slightly fell off. November and December were dry; but light rain in the middle of January greatly benefited the crops. In some districts in the eastern half of the province linseed was attacked by an insect pest, but the damage done was not serious.

In Bengal the heavy rainfall of October was on the whole beneficial to winter oilseeds, though it was reported to have injuriously affected the crops in some districts. There were light showers in November, except in Bihar, where owing to want of rain in November and December, the crops suffered. Throughout Bihar and north Bengal, however, light showers were obtained in January, and in February the showers throughout the province were fairly copious. March and April were practically rainless and this facilitated harvest operations. On the whole therefore the season was favourable.

In Assam the season was not altogether favourable to the mustard crop. In the Surma Valley and parts of Lower and Central Assam, cultivation was to some extent impeded by heavy rain and consequent floods at the commencement of the sowing season. Want of rain was subsequently felt over the greater part of the mustard-growing area.

In the Central Provinces and Berar, sowings, though somewhat late owing to the heavy and continuous rainfall during August and September, were successful over increased areas in the important linseed-growing districts. But the absence of the winter rains and the unfavourable conditions during the end of February and the beginning of March told seriously upon the crop. The cloudy weather which preceded the February rain caused the flowers to wither before the seed was set, and also favoured insects which damaged the crop considerably in some districts.

In Bombay a very extensive area was sown with linseed. The increase was due to larger sowings of wheat and jowar with which the oilseed is sown mixed. The crop was fairly good everywhere, though excessive late rains induced disease and rust in places. As regards rapeseed, in Gujarat there was a decrease in area as well as in yield owing to deficient late rains. In Sind the inundation was favourable and the outturn good.

In Hyderabad owing to excessive rain autumn sowings suffered considerably and winter sowings had to be suspended. Nevertheless, the area placed under both linseed and mustard was much larger than in the preceding year. Severe cold and insects, however, injured the crops in places.

[1903-04]

OILSEEDS 1904-05

In the Panjab the season was favourable for sowings except in some of the central and south-western districts where water-supply was deficient. The severe frosts of January and February were, however, disastrous to the crop almost everywhere.

In the North-West Frontier Province, conditions were unfavourable at sowing time except in Hazara and Peshawar where the monsoon and autumn rains were favourable. The crop was, however, at one time threatened with extinction by severe frosts, but it rallied under the influence of copious rains in March followed by bright settled weather in April.

In the United Provinces conditions were very promising till the end of December, but the crop suffered severely from the frosts of January and February, and where it survived the frost, was badly attacked with rust. The rapeseed crop was also damaged by insects.

In Bengal the season was on the whole an unfavourable one for oilseeds. The crop was seriously damaged by hail, frost, and rain chiefly in the districts of Bihar and the Rajshahi Division where the bulk of the crop is grown. The excessive rainfall of March and April also hampered the progress of harvesting operations.

In Assam the season was not unfavourable, but a somewhat restricted area was sown. The crop was fair.

In the Central Provinces and Berar the delicate linseed crop was unable to support the unusual inclemency of the season. In the northern districts frost in early February damaged the crop seriously; later the cloudy weather and rain storms in the end of February and beginning of March carried a step further the destruction already caused in the north and did serious damage in most of the southern districts. Insects and rust appeared in places, and the deficiency of the winter rains and damage caused by hail in Berar resulted in a lighter crop in that part of the provinces.

In Bombay an extended area was placed under linseed, but the crop suffered from excessive cold and frost in Gujarat and from deficiency of moisture in the Deccan and Karnatak. As regards rapeseed the area contracted owing to low inundation and deficient water-supply and the crop suffered, particularly in Sind, from excessive cold and frost.

In Hyderabad the area sown with linseed was much larger than in the preceding year, but the crop was somewhat affected by the failure of late rains.

Sesamum (til or jinjili)

1891-92

In the Panjab the season was decidedly unfavourable, the late arrival of the monsoon causing a reduction in the area sown. The crop was damaged by locusts, and the yield was very poor.

In the United Provinces the monsoon rain was quite abnormal, light in the beginning, but excessive at the latter end of the season. The area and yield were both small.

In the Central Provinces the season was unfavourable and sowings were greatly restricted. The crop was very poor.

In Berar excessive rain and insects injured the crop, though its condition was favourable in some districts owing to sufficient and seasonable rain.

In Bombay the rain at sowing time was favourable, but the growing crop suffered from drought as well as from excess of moisture in places. In Sind a low inundation and locusts affected both area and yield.

In Madras the area and yield were reduced by the unfavourable character of the season.

1892-93

In the Panjab the spring was very dry and the summer rains late, but they were heavy at the end of July, stimulating sowing. The yield was very good.

In the United Provinces sowing was somewhat delayed by the late commencement of the monsoon, but light rain in July proved very favourable. Heavy rains in August did some injury, but the crop on the whole remained in good condition.

In the Central Provinces conditions were favourable except in tracts where excessive rain damaged the crop.

In Berar unfavourable rain and the rotation of crops caused a decrease in the area sown. The crop promised well, but excessive rain at the close of the monsoon affected the yield seriously.

In Bombay there was timely rain, and extended sowings were made in the Deccan and Karnatak; prospects were affected by heavy rain late in the season, but the yield was better than in the preceding year. In Sind the harvest was bad.

In Madras, owing to exceptionally favourable rainfall in February and March, extensive sowings were made and a fair yield was expected, but drought in some places, and exceptionally heavy rain in others, injured the growing crop.

1893-94

In the Panjab, though the season had very different effects in different districts, there was a general increase in the sown area; but the yield was small.

In the United and Central Provinces the weather was suitable for sowings, and the crops promised well at first, but excessive rain in the autumn caused injury, though less in the United than in the Central Provinces.

In Berar the early sowings were impeded by deficient, and the latter sowings by excessive, rainfall; and excess of rain in September injured prospects.

In Bombay there was a considerable decrease in the area sown, owing to untimely rain and an extension of cotton cultivation. Rain was excessive in September, and the yield was not good. In Sind, owing to the want of rain and the early subsidence of the river, the yield was not proportionate to the extended area sown.

Heavy rain also interfered with sowing in the northern and north-eastern parts of Madras, but elsewhere in this province the season was favourable. The late crop was well up to the average in the central districts, but in the southern districts the absence of rain in January and February restricted the area. In no part of the province was the crop good.

In Hyderabad the crop was damaged by excessive rain during the harvesting season.

In the Panjab suitable rains and previous high prices favoured extended sowings, but the premature cessation of the early rains combined with an excess in the later rains to reduce the yield.

1894-95

In the United and Central Provinces the season began well, but injury was afterwards done by excessive rains, especially in the Central Provinces, where they not only damaged the crop in flower but also seriously impeded harvesting operations. In the United Provinces the loss occasioned by the rains was considerable.

In Berar an extension of jawar sowings and the low prices obtained for sesamum in the previous year combined to reduce the area sown. Rain did much damage to the crop in flower, and the yield was generally poor.

In Bombay the early sowings were injured by rain, but the increased area sown later more than counterbalanced the loss. The yield was deficient owing mainly to scanty rain after sowing and to excessive rain when the crop was in flower. In Sind with favourable rain and extensive inundation the yield was fairly good.

In Madras heavy rains interfered with sowings of the early crop, especially in the Carnatic. The early cessation of the north-east monsoon rainfall restricted the area sown with the late crop, especially in the Carnatic and the southern districts. Owing to the continuance of unfavourable conditions the yield was very poor.

In the Panjab the rainfall was unfavourable, and the crop on the whole was poor.

1895-96

In the United Provinces the rains were timely and favourable for sowing, but they ceased in July, were moderate in August, and scanty in September and October. The crop did not develop fully, while insects and strong winds in some places did further damage. The yield did not come up to the expectations formed of it.

In the Central Provinces the season was generally favourable for sowing, and rainfall was well distributed to the end of August. This encouraged more extended sowings than usual, but the season became adverse later by reason of deficient rain and the abnormal heat which prevailed to the end of November.

In Berar there was satisfactory rain at the time of sowing, but a long period of drought followed, and the yield was bad.

In Bombay a large area was sown, the rainfall being seasonable, but the crops, both early and late, suffered from want of moisture. In Sind scanty rain and a low inundation curtailed the area, and the young crop suffered from want of moisture.

In Madras the early crop covered an area greater than the average owing to the favourable character of the early rain, and the late crop an area smaller than the average, on account of the excessive sowing of the early crop. Rain was too heavy in some places, while it was deficient in others, and the yield from both crops was bad.

Everywhere except in Madras and Bombay an extended breadth of land was sown, but the early withdrawal of the monsoon after the middle of August proved as unfortunate for sesamum as for other crops.

1896-97

In the Panjab the crop was very poor.

In the United Provinces the prospect of a fair season disappeared with the withdrawal of the monsoon in August, and the crop was greatly injured, especially in unirrigated lands.

In the Central Provinces the area sown was large, but the crop generally fared bad except in Nagpur: and the yield was more or less poor, though much larger than the average owing to the increasing favour with which the cultivators regarded the crop.

In Berar also a large area was placed under the crop owing to the promise at sowing time of a good season, but the drought which supervened injured the crop greatly.

In Bombay, with the exception of Gujarat and Sind, the early withdrawal of the monsoon seriously injured the crop. In Gujarat the season was favourable and this oilseed took the place of damaged cotton. In Sind the inundation was good.

In Madras the sowings of the early crop were greatly contracted owing to the want of seasonable rainfall, while those of the late crop were extended from timely rain. The former

OILSEEDS

crop suffered severely from drought, and the result was a poor yield. The latter did not suffer as much.

1897-98

The late arrival of the south-west monsoon and the desire of the people to place greater breadths of land under food-crops accounted for a contraction of the area sown in most provinces.

The yield varied greatly from about an average crop in Bombay, the United Provinces, and the Panjab, to greatly below the average in Madras, Sind, and Hyderabad.

In the Central Provinces and Berar the conditions were exceptionally favourable; the area sown was more than ordinarily large, and the yield was estimated at about double the average. These large yields so far balanced the less favourable results in other provinces that the aggregate yield for all the reporting provinces was well in excess of the average.

1898-99

In the Panjab the area sown was a little larger than the average, but the cessation of the rain when the crop was ripening was followed by a poor yield.

In the United Provinces the area sown was restricted, and excessive rain towards the latter part of the season deteriorated prospects.

In the Central Provinces the season was unfavourable, owing to the uneven distribution of the rainfall. The early sown crop suffered from excessive rain, and from the sudden withdrawal of the monsoon which left insufficient moisture in the soil and interfered with the development of the plants. The germination of the late sown crop was very defective, owing chiefly to excessive rain at sowing time.

In Berar sowings were made under favourable seasonal conditions, and, though the crop was injured by the failure of the late rains, the yield was large.

In Bombay the increase in the area sown in parts of Gujarat and north Deccan, due to favourable rains at sowing time, did not suffice to counterbalance the large decreases elsewhere, which were attributed to insufficient rain in the southern Deccan and Karnatak and to a low inundation in Sind. The season was generally favourable and the yield was large.

In Madras the season was favourable for the late crop, and it grew in good conditions on an extended area. But the area under the early crop, which occupies about three times the area sown with the late crop, yielded a poor crop.

1899-1900

In the Panjab the season opened very well, but became more unfavourable as the months passed, and the yield was small.

In the United Provinces the excessive rainfall in the beginning of the season gave rise to apprehensions regarding the prospects of the crop, and later the crop was damaged by continued drought in the Meerut, Agra, and Rohilkhand divisions, where, however, *til* is not extensively sown. In the tracts in which the cultivation of *til* is important the moderate rainfall of August and September proved very beneficial and the yield there was good.

In Bengal on the whole the season was good enough, though the rains were irregular, excessive in some places, and insufficient in others; and the yield was larger than the average.

In the Central Provinces the season favoured sowing operations, but it did not continue favourable, and the abnormal heat of November did much injury. The early crop was fairly successful, but the cold weather *til* in many places began to wither when on the point of maturity.

In Berar the crops withered under the drought and the excessive heat which followed.

In Bombay the early rains were scanty and the later rains failed entirely. Owing to the extremely unfavourable nature of the season the crop withered away in many places, and where it survived gave the poorest yield.

In Madras the area sown was restricted, the south-west monsoon being unfavourable in most places, and the yield was not good.

In Hyderabad the rains failed, and the crop withered under the drought which followed some good rain in September.

1900-01

In the Panjab the area sown was much below the average, heavy floods in some districts restricting sowings.

In the United Provinces the monsoon began late and was generally scanty and unevenly distributed until the third week of August. Then and in September, excellent rain fell, and its distribution was all that could be desired, especially in Bundelkhand, which ordinarily contains four-fifths of the whole area under sesamum. Except for heavy falls in Benares and Gorakhpur in the second week of October, the weather during that month and November was clear and reasonable.

In Bengal the monsoon rainfall was capricious and irregular, and, on the whole, the season was not favourable for oilseeds, which suffered from an excess of rain in any tracts, while in others they suffered from drought.

In the Central Provinces the conditions at the time of sowing, both of the early and late varieties, were generally favourable and a large area was sown. Sesamum is a cheap crop to sow, and it resists drought better than most crops. The difficulty of obtaining the relatively

expensive seed of wheat and other spring crops stimulated its cultivation. The early crop suffered somewhat from the heavy rain at the close of August and during September. The germination of the late sown crop, which is more extensively grown in the south of the provinces also was irregular, heavy rain just after sowing having washed away part of the seed. Drought during October and November, abnormal heat, and insects, following on cloudy weather, also injured the crop. In consequence the yield was smaller than the normal.

In Berar the rains at sowing time and the monsoon rains were favourable; there was no prolonged break, and the crop developed well under congenial climatic conditions.

In Bombay the conditions were good in Káthiáwár at the time of sowing, and double the average area was sown, the increase there and in Gujarat more than making up for the contraction in other parts of the Presidency caused by the preference of cultivators for the cultivation of food-grains.

In Madras the conditions were not good, and though a large area was sown the crop was deficient.

In Hyderabad a few seasonable showers in January, which were badly needed, improved prospects.

In the Panjab and the North-West Frontier Province the rainfall at sowing time was unevenly distributed, being excessive in some districts and insufficient in others. The yield was below the average owing chiefly to the early cessation of the monsoon rains.

1901-02

In the United Provinces rain commenced late, about the 10th of July; the weather in August was favourable and the rainfall above the normal in most districts; a break ensued early in September; but at the end of the month heavy rain was received in the greater part of the province. The rainfall of October was deficient. November was practically rainless. Sowings were late, the drought in September retarded growth, and deficient rain in October caused further injury.

In Bengal there was no rain in December and January, and the winter crop suffered severely in consequence. A very restricted area was sown owing to drought at sowing time.

In the Central Provinces the rainfall was very unfavourable. The early sown variety suffered, especially in the north, from excessive rain, the crop being washed out in places while weeding was retarded or altogether prevented. The conditions were still more unfavourable for the late sown crop, which is put down at the end of August or during the first week of September. Continuous rain at this time interfered with sowings and much of the seed sown was washed out by heavy showers. Germination was very defective and many fields were ploughed up and devoted to other crops. A prolonged break subsequently occurred during which the young plants that germinated languished from want of proper moisture, and some injury was also caused by insects.

In Berar the monsoon rains were heavier than usual and the crop suffered from excessive moisture; during July and August the rainfall was almost continuous, and weeding operations were rendered impossible. Rats and locusts also attacked and injured the crop.

In Bombay the increase in the area sown in parts of Gujarat and Karnátak, due to favourable rains for sowing, was not sufficient to counterbalance the large decrease elsewhere, resulting mainly from the scantiness of sowing rains in the Presidency proper and to a low inundation in Sind. In Gujarat the season was very unfavourable owing to the failure of the late rains, while rats and locusts did some injury in places. In the north Deccan, too, the crop suffered to some extent from the same causes, while in Sind it was affected by a deficient water-supply.

In Madras in the Circars, the Deccan districts, and the west coast the sowings were about up to the average, but owing to the unfavourable season they were very deficient elsewhere, especially in the Carnatic.

In Hyderabad the area was above but the yield below the average, the late rains having been unfavourable.

In the Panjab there was an increase in the area sown owing to seasonable rainfall and the low floods in the riverain tracts which facilitated cultivation in lands usually inundated. In Ferozepore, Montgomery, and Jhang however there was a marked falling off owing to deficient moisture at the time of sowing. The outturn was good in Gujarat, Lahore, and Ambala. Elsewhere it was only average or below average owing to a break in the rains of July and August. The crop was also attacked by insects in places.

1902-03

In the North-West Frontier Province the crop was above the average, both as regards area and outturn.

In the United Provinces the rains set in rather late in the first week of July and continued till the close of the month. In the first and the last weeks of August rain was fairly general, but in the second and third weeks there was a break over a larger part of the provinces. The rainfall of September was almost uniformly excellent. Light but insufficient rain was also received in October in most districts, November was entirely rainless. The season of light rainfall was in general favourable to the sesamum crop.

In Bengal the monsoon rains ceased early and the drought continued through January in Bihar and east Bengal, while outside that area there were seasonable showers in all the chief oilseeds-growing districts except Murshidabad. There was general and beneficial rain in February and March, but, on the whole, the season was not favourable.

In the Central Provinces the monsoon though late was favourable both for the sowing and the growth of the early variety. The late variety was sown under fairly favourable conditions and germination was good. But afterwards conditions were less favourable and there was some deterioration.

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In Berar the rains began late and sowings were undertaken later than usual, but subsequently the season was favourable. Although the rainfall generally was below the average, the showers were timely, and the crop was in a thriving condition. Unfortunately when harvest operations commenced at the end of October the weather again turned wet and considerable damage was done to the crop.

In Bombay the monsoon broke much later than usual and did not permit full sowings of the early crop. For the late crop, however, the season was favourable and extensive sowings made up the deficit under the early crop. Though the crop suffered at first a little by a prolonged break in the middle of the season and later on the reaped and ripe crop was somewhat damaged by excessive rain, the season on the whole was favourable. The area and outturn were both deficient in Sind.

In Madras owing to seasonable rainfall an extended area was sown, and the condition of the crop was generally fair.

In Hyderabad the crop was unfavourably affected in places, but nevertheless the total yield was the largest recorded in the territory.

1903-04

In Bombay owing to favourable sowing rains an extended area was placed under sesamum, especially in the Gujarat States. Though the crop suffered in parts of Gujarat from locusts, in the east Deccan from deficiency of moisture, in the Karnatak and Konkan from excessive rain, and in Sind from blight and insects, the season on the whole was fairly satisfactory.

In Madras the rainfall at sowing time was seasonable, and the condition of the crop generally fair.

In the Central Provinces the rainfall during August and September was exceptionally heavy and continuous. This interfered with weeding operations and the growth of the early sown crop, besides impeding the sowings and germination of the late variety. Heavy showers in October considerably damaged the young plants, some fields being ploughed up, and materially deteriorated the prospects of the crop.

In Berar the damage caused by heavy rain was greater than in the Central Provinces.

In Bengal the season was on the whole favourable, though the crop was injuriously affected by the heavy rain of October in some districts and by the want of rain in November and December in some others.

In the United Provinces the crop at first suffered somewhat from the heavy rain of August and September, but the damage caused by the excessive rain of October and the strong winds that accompanied it was great.

In the Panjab damage was reported from floods and late rains, but fortunately the crop in the important districts was not much affected.

In Hyderabad the crop suffered to a considerable extent owing to heavy rains, although an extended area had been brought under cultivation.

1904-05

In Bombay the area sown was much below that of the preceding year owing to deficiency of rain in the Presidency proper and low inundation in Sind. The early crop suffered through the prolonged break after sowing, but a portion was saved by the late September rains which also induced sowings of the late crop. This started well, but suffered equally with the early crop owing to the absence of subsequent rains.

In Madras also a restricted area was sown owing to want of timely and sufficient rainfall. The condition of the crop was, however, generally fair.

In the Central Provinces and Berar the season was unfavourable. The sowing of the early crop was delayed in some districts owing to the lateness of the monsoon. Subsequently heavy and continuous rain and then a long break checked the growth of the plants and interfered with late sowings. The crop was detrimentally affected by the droughty conditions that prevailed and the damage caused by locusts.

In Bengal the season was not unfavourable at the beginning, but the crop was afterwards damaged by hail, frost, and excessive rain.

In the United Provinces sowings were delayed and restricted owing to excessive rain. The crop suffered from excess of rain at the beginning and from drought at the end of the season.

In the Panjab also sowings contracted on account of the late arrival of the monsoon in most districts and its failure in the Central Panjab. The crop suffered from want of sufficient moisture and the yield was unsatisfactory in all but three districts.

In Hyderabad the season was unfavourable owing to insufficient rainfall in the early months of the monsoon, coupled with failure of the late rains.

JUTE**1891**

The rainfall at sowing time was excessive, and the area placed under the crop was smaller than in the preceding year. Germination and growth were also affected by excessive rainfall. Later, again, the want of rain was felt in several districts.

Excessive rainfall injured the plant in some districts, but on the whole the season was good, and a larger area was sown under the stimulus of high prices.

JUTE
1892

The area sown was nearly equal to that of 1892, but the crop was greatly injured in most districts by heavy and continuous rain in the middle of the season.

1893

Rain was abundant and well distributed to the end of May, and the area sown was about equal to that of 1893. In June rain was deficient in several districts, though normal or in moderate excess in parts. At the end of July there was general and heavy rain throughout north Bengal, and during the first-half of August the fall was favourable in every district.

1894

The rainfall was in excess of the normal quantity in April and the first-half of May, heavy in the second-half of May in east Bengal, and less than the average in other parts. In the next two months it was deficient, and in the first-half of August it continued deficient in central and western Bengal, and was excessive in north Bengal and north Bihar. The area sown was almost the same as in the preceding year; but the yield was larger.

1895

Owing to scanty rain when sowings were made the area placed under the crop was a little smaller than in 1895. In May and the early part of June excessive rain interfered with growth and with weeding. In July and August it was deficient, still further impairing the prospects of the crop in most districts.

1896

On the whole the season was favourable, and there was enough water for steeping.

1897

The area sown was smaller than in 1897, owing partly to the unfavourable character of the season at sowing time and partly to the low prices of jute in 1897 and to high prices of food-grains.

1898

The weather, though seasonable in the beginning, became extremely unfavourable towards the end of the season.

1899

There was some deficiency of rain in March and April, which prejudicially affected sowings in a few places. In May and the first fortnight of June, the rainfall was also light, but good rain later greatly improved the prospects of the crop. In July there was heavy rain in most districts, but a partial drought followed in August which, combined with a want of floods water from the rivers, hampered steeping operations in north and east Bengal, and in a few cases diminished the yield. Fair rains fell in the first-half of September, but almost too late to have much effect on the yield.

1900

The rainfall in the earlier months of the year was almost uniformly unfavourable. In June there was heavy rain in almost all the important jute-growing districts; in July the rainfall was very irregular but not seriously deficient; the rainfall of August was again capricious, and was in considerable defect in some important jute-growing districts. There was heavy rain early in September, and thereafter it was fine and hot. On the whole, the weather was unfavourable up to the close of May, but it was exceptionally favourable afterwards.

1901

In Bengal the season was abnormal. A prolonged drought ended in the middle of March. In April and May the rainfall was excessive, (specially in the Dacca and Tippera divisions. In south-eastern Bengal the weather was, therefore, very unfavourable for sowings, and to a less extent this was the case also in north-eastern Bengal. The heavy rain in May also retarded weeding. Since then the weather conditions were normal, but the prospects of the crop were not encouraging.

1902

In Assam the weather was unfavourable at the beginning of the season, and the adverse influences persisted to the end. The crop was injured by excessive rain and flood.

In Bengal rainfall was deficient at the time of sowing, but later on conditions improved owing to the favourable rainfall in August. On the whole the season was generally a favourable one.

1903

In Assam the season was unfavourable at the beginning owing to drought in April and May, but subsequently weather conditions turned favourable, as was the case in Bengal.

JUTE
1904

In Bengal an extended area was placed under the crop. In the early part of the season excessive rain damaged the crop in the most important jute-growing districts. In other districts the weather was generally favourable, though weeding operations were hindered by heavy rain in places.

In Assam the season was very unfavourable. Heavy rain in April and May accompanied in places by floods and hailstorms greatly diminished the area sown and seriously affected its prospects.

INDIGO**1891-92**

In Bengal the season was altogether disastrous in consequence of an unusual deficiency of rain, and although the weather was more favourable at the manufacturing season, the yield was hardly increased.

In the United Provinces the rains commenced very late and were heavy and continuous, causing a reduction in the area sown. The excessive drought in June and July seriously tried the crop, while the continued wet weather of August prevented the proper development of dye in the leaves.

In the Panjab the late arrival of the rains, and the ravages of locusts in some places, reduced the area and the yield.

In Madras the area and yield were seriously affected by an unfavourable season.

1892-93

In Bengal the season was unfavourable at sowing time owing to deficient rain in autumn and spring; conditions improved later with favourable rain, but excessive rain and cloudy weather during manufacture again operated injuriously. In Bihar the weather was favourable throughout, although in some parts very heavy rain and floods caused injury.

In the United Provinces the autumn rains were late, heavy, and continuous, and the plants suffered to some extent; but the yield of dye was much better than in the preceding year.

In the Panjab a protracted drought in the early summer retarded sowings, and the area sown was very much reduced.

In Madras the crop was on the whole good, and it would have been very good throughout but for the unfavourable character of the season in December

1893-94

In Bengal the rainfall was favourable at sowing time, and a large area was sown, but heavy and incessant rain and floods caused great injury.

In the United Provinces a favourable season and a rise in the price of indigo at Calcutta led to an increase in the area sown: the seed germinated freely, and the early commencement of the rains greatly benefited the crop.

The rainfall was favourable in the Panjab, and the state of the canals generally satisfactory, the result being a large area sown and a good yield.

In Madras larger sowings were made owing mainly to timely rains.

1894-95

In Bengal the season was on the whole somewhat late, but the weather was generally favourable. In Bihar the early part of the season was particularly good, but it was followed by a long period of drought which injured the produce in most districts in the early part of the manufacturing season.

In the United Provinces although the seed germinated well and timely rain benefited the crop, it suffered from deficient rain in the second-half of July and from heavy and continuous rain in August; but the average condition was not much below that of the preceding year.

In the Panjab the area sown was increased, and the crop was good.

In Madras the large area sown and the fair yield secured in the preceding year led to a further increase in cultivation; the yield was generally fair.

1895-96

In western Bengal the rainfall on the whole was deficient and untimely; in northern and eastern Bengal and in Bihar it was favourable in most places.

In the United Provinces the crop suffered at first from want of rain in most districts, and then improved with moderate and favourable rainfall, except in the Upper Doab where it suffered from floods. On the whole, however, the condition of the crop was better than in the preceding year.

In the Panjab the crop was fair.

In Madras the season was favourable in Kistna and North Arcot where a large area was placed under indigo, but elsewhere sowings were restricted owing to the insufficient rain of the south-west monsoon. The yield generally was fair.

INDIGO
1896-97

In Bengal, owing to the early cessation of the monsoon of 1895 and the scanty showers in the spring of 1896, moisture was generally deficient at sowing, the deficiency continuing in most districts with the result that the yield was below the average. In Bihar the first cuttings were generally poor, but the dry weather gave an extremely and unusually good second cutting which in many places in north Bihar more than compensated for the deficient first crop.

In the United Provinces germination was satisfactory and prospects very favourable until July, but the late rains were scanty and unevenly distributed. The crop suffered in consequence.

In the Panjab the rainfall was scanty, but the condition of the young crop was generally fair. Later in the season the continued deficiency of rain was felt severely, and the crop on unirrigated land dried up completely.

In Madras the season opened with favourable conditions, and an increased area was sown; but the rain thereafter was deficient and the yield small.

1897-98

In Bengal the area sown was small, the contraction being due to insufficient rain at sowing time. The crop suffered greatly from the absence of seasonable rain in Bihar and north Bengal and from excessive rain in south Bengal.

In the United Provinces the season was not favourable; the growth of the plants was interfered with, early in the season, by excessive heat and insufficient rain, and the heavy rain of July and August flooded the low lands and greatly injured the indigo growing on them.

In the Panjab the crop is grown on irrigated lands only, and its condition was generally good.

In Madras the area sown was small, the contraction being due not so much to the deficiency of seasonable rain as to the replacement of indigo by food crops.

1898-99

In Lower Bengal the season was generally unfavourable, but it was favourable in north Bihar.

In the United Provinces the season was not favourable. The crop started well, but a large proportion was lost through insufficient irrigation and injury by insects, and further serious injury was done by continuous heavy rain, especially in the Benares division.

In Madras and the Panjab also the season was on the whole unfavourable, but the contraction in the area sown was stated to be partly due to the low prices of 1897.

1899-1900

In Bengal the season in the beginning was not unfavourable, but the excessive rain which fell in June, July, and August was most injurious, and the crop was also injured in many districts by the floods which followed the excessive rain.

In the United Provinces the crop continued in good condition until the end of June, but excessive rain fell in July and seriously injured the plant everywhere, especially in the eastern districts. The rains then fell away and drought, particularly in the Agra and Meerut divisions, added to the injury done by heavy rain.

In the Panjab the crop suffered from the absence of rain and the stoppage of canal irrigation in Multan and Dera Ghazi Khan. In some unirrigated tracts it failed entirely.

In Madras also the season was generally unfavourable and the yield deficient.

1900-01

In Bengal sowings and the early growth of the crop were retarded by the scanty rain of April and May. Fairly good rain in June and July was followed by an interruption in August, but prospects were improved in Bihar by abundant rain in September, which, however, was accompanied by floods and consequent injury to the crop in Lower Bengal. In October sufficient rain fell, and the season generally was much better than that of 1899. The area, however, was restricted, owing to the substitution of other crops for indigo in north Bihar under the discouragement of the comparatively low level of prices during the preceding three seasons. The yield on the whole was good in the districts of north Bihar, but very poor in Lower Bengal where, however, the cultivation of indigo is now greatly restricted.

In the United Provinces, unlike Bengal, the area sown increased, the increase being ascribed to the temporarily improved prices in the previous season. It may be that that improvement was an inducement to native growers of indigo, while it did not remove the discouragement to European planters. In the early months of the season prospects were good, but heavy rain in the Doab towards the end of the season reduced the yield.

In the Panjab the rains were late at sowing time, but the crop did well later when the rain came down abundantly.

In Madras the high prices of food-grains induced cultivators to restrict their sowings of indigo. The crop sown was very fair on the whole.

1901-02

In Bengal the season was on the whole unfavourable. During the early months of the year the rainfall was in slight defect, but in May there was good and generally well distributed rain. The monsoon rains broke late and were deficient in June and July. There was little

INDIGO

rain in October, and the showery weather at the end of November did not extend to north Bihar. Besides the unfavourable character of the season, the area was affected by the fall of prices resulting from the competition of synthetic indigo.

In the United Provinces the reduction of area was proportionately much greater than in Bengal. The prospects of the crop, which had been affected by the late arrival of the monsoon, continued to be unsatisfactory until the end of August, but fine dry weather in September favoured manufacture.

In the Panjab a restricted area was sown owing to late inundation from canals in the south-western districts and the closing of factories consequent on the fall in prices. There was an insufficiency of rain and canal irrigation after the sowings, and some injury was done by locusts.

In Madras an extended area was sown in Nellore and Kistna owing to favourable weather for sowings, but almost everywhere else the cultivation of indigo continued to decline. The low prices realised, and the high prices of food-grains, are the principal reasons assigned for the decrease, but in the Carnatic, where the decrease was marked, the season was very unfavourable.

1902-03

In Bengal the season was generally very unfavourable owing to capricious and ill-distributed rainfall; and the outturn was the worst on record. The unfavourable prospects of the industry caused by the competition of synthetic indigo also contracted the area, which had been steadily diminishing in past years.

In the United Provinces the decline in the cultivation of indigo caused by the fall in prices was very rapid and pronounced. The late commencement of the rains stunted the growth of the plant, which was further retarded in places by the continuous rain of July. The dry weather during August was, however, favourable and the produce of dye was reported to have been satisfactory.

In the Panjab the decrease in the area under indigo was almost as great as in the United Provinces, the contraction was due largely to the small margin of profit left by the fall in prices, but partly also to the insufficiency of canal water and unfavourable weather.

In Madras also the cultivation of indigo was fast declining as the low prices realised caused preference to be given to food crops and earthnut. The crop was reported to be generally good.

1903-04

In Bengal the season opened unfavourably the rainfall being very insufficient, but later good rain was received, and thenceforward the conditions were favourable.

In the United Provinces the monsoon was unusually late in arriving, and general rain was not received till the end of the third week of July. Injury from drought was therefore reported from some places; but the rains, when they did come, were good, and the damage was much less than had been anticipated. In the Doab, where the crop was promising from the beginning, the yield was satisfactory. Elsewhere it was not so good.

In the Panjab there was an extension of cultivation due to timely running of the canals and seasonable rainfall. The condition of the crop was also good.

In Madras also owing to good and timely rainfall the cultivation of indigo showed a slight improvement, and the condition of the crop was reported to be generally good.

1904-05

In Bengal the season was very unfavourable. During the months of January to April June and September the rainfall was deficient; it was heavy in May and October, while in July and August the fall was excessive and did considerable damage to the crop in many districts of Bihar.

In the United Provinces sowings greatly contracted. Prospects were, however, good at the beginning of the season; but the heavy and continuous rain, which lasted from the second week of July to the last week of August, caused serious damage to the crop.

In the Panjab insufficiency of canal water interfered with sowing operations in most places. Conditions were, however, somewhat favourable in Multan resulting in an increased area being sown in that district. The condition of the crop was good.

In Madras the area contracted to about half of that of the preceding year owing to scanty rains and fall in prices. The condition of the crop was generally fair.

SUGARCANE**1899-1900**

In Bengal the season was generally favourable to the crop at the beginning, but excessive rain in some parts, in August, September, and October, adversely affected prospects, while in a few places, the crop was injured by the absence of seasonable rainfall and by insects.

In the United Provinces the season was favourable until the autumn rains set in; but the excessive rainfall of June and July seriously injured it, and further injury was caused by the scanty rainfall of the succeeding months. Slight injury from insects was also reported from several districts.

In the Panjab the unfavourable weather conditions affected even the crop grown on irrigated lands, and cane grown on unirrigated land was practically a failure. The crop was stunted in growth and deficient in juice, while owing to the great scarcity of fodder, the cane was used entirely or very largely in many districts as cattle-food.

In Madras the weather in many places was unfavourable, and some of the crop suffered from want of water, especially in the Circars.

In Bengal the rainfall to the end of July was generally in defect; in August it was badly distributed and more or less deficient; in September it was copious and general; there was very little in October, and in November and December practically none. On the whole, the monsoon conditions were not very favourable to the crop, which also, in a few districts, suffered to some extent from insect pests.

In the United Provinces the rains of February and March favoured sowings, and the crop germinated freely. Hot winds and afterwards insufficient rain in June and July retarded growth; but the crop was generally very healthy and promising. The rainfall was moderate in August, but unusually heavy in September, and accompanied by high east winds. Floods also caused some local injury on low lands. On the whole the autumn rains greatly benefited the crop. November was rainless, but December and January were exceptionally wet; and cane-pressing was delayed in places by excessive rain.

In the Panjab the area under cane was slightly reduced, owing to dry weather at sowing time in April and May and to the fact that prices of food-grains were so high that it was more profitable to grow them than sugar on some lands. In Hoshiarpur, one of the chief cane-producing districts in the province, another reason assigned for the decline was the supersession of indigenous by imported sugar. In Sialkot it was said that a great number of cultivators emigrated with their cattle to other places owing to the dearth of food and scarcity of fodder in the previous year, and as most of the cane crop was used as fodder in the preceding year, the supply of seed was small and the price high. Although there was, on the whole, a decline in the area under cultivation, both irrigated and unirrigated, the season was far more favourable than the previous year.

In Madras early rains and an adequate supply in tanks led to increased sowings. The condition and yield of the crop were generally fair.

In Bengal, on the whole, the season was not unfavourable, but rain was very scanty in February, March, and April, and the crop suffered from locusts and insects in a few districts. In December and January again there was a complete absence of rain. The area sown was below the normal owing to the unfavourable character of the early part of the season.

In the United Provinces the rains of January and February 1901 were ample and germination was good, and the supply of water in the hot months was generally sufficient except in a few districts. Injury to the crop in several districts resulted from various causes—hot winds, insects, and the late arrival of the monsoon; but it was serious only in the Rohilkhand division and in parts of the Meerut division where the crop was attacked by grasshoppers. The autumn rain in July, though below the normal, was well distributed, and the rain in August was favourable and prospects improved materially, though the injury caused in the tracts mentioned could not altogether be made good. The season later on was too dry to give a full yield of juice. In the two important cane-growing divisions of Meerut and Rohilkhand the crop was unpromising from the beginning owing to the injury caused by grasshoppers, and the drought of September and October further affected growth. In the other divisions the yield was somewhat better.

In the Panjab the area under sugarcane increased in irrigated tracts, but elsewhere there was a contraction due to scanty rain in March and April. The crop suffered from insects, locusts, and rats, and seriously from drought in September and October and the severe frost that followed. The result was so bad that in parts of Gujranwala the juice was not extracted and the cane was given as fodder to the cattle. The crop on the whole was below the average and, compared with the area, the estimated yield was disproportionately small. Another reason assigned for the decline was the supersession of indigenous by foreign sugar.

In the North-West Frontier Province the crop was on the whole above the average. Though the failure of the rain at the time of its maturing caused some decrease in the yield, the decline was more than compensated by the increased area sown.

In Madras, on the whole, a full normal area was planted. Rainfall was deficient in some places; but the yield was on the whole fair, though in the Circars the crop was far from good and in the Godavari delta disease caused material loss.

In Bengal the season was not generally unfavourable though excessive rain at the time of planting caused some contraction of area, and damaged the young plants in parts of north and east Bengal; while a few districts in Bihar, on the other hand, suffered from drought.

In the United Provinces the rains at sowing time—that is, February and March—were very deficient. Germination was, however, good except in the eastern districts, where later on drought and white-ants did further damage. The autumn rains in July were fairly continuous, well distributed, and generally above the normal. In the first and last weeks of August rain

1900-01

1901-02

1902-03

SUGARCANE

SUGARCANE

was fairly general, but in the second and third weeks there was a break over the greater part of the provinces, and in places some injury from drought resulted. The rainfall in September was almost uniformly excellent. Light rain was also received in October in most districts, while November and December were entirely rainless and were followed by severe frost, which damaged the crop more or less in the western half of the province just when pressing had begun.

In the Panjab there was a decrease in the area sown in all districts except Jalandhar and Karnal owing to the absence of rain and deficient supply in the canals in February and March. The monsoon rainfall of August and September was satisfactory, but the subsequent failure of the winter rains and the severe December frost deteriorated the condition of the standing crop, and in parts of Lahore, Sialkot, and Amritsar it was used as fodder. The yield on the whole was consequently below average.

In the North-West Frontier Province the season was favourable for the sugarcane crop, and the inadequate rainfall had very little effect on this crop as it is grown exclusively on irrigated lands, and the canal irrigation on which the crop depends was satisfactory.

In Madras there was a contraction in the area owing to the shortness of water-supplies in parts at the planting season. The decrease was general and was particularly noticeable in South Arcot where it was ascribed to a fall in the prices of jaggery. The crop was reported to be generally good.

1903-04

In Bengal, owing to the drought that prevailed throughout the greater part of the province in the early part of the season, the area contracted slightly. The cane-growing and harvesting seasons from June to December were, however, favourable and gave much better results than had been anticipated at first.

In the United Provinces the rains at sowing time,—that is, February and March—were very deficient as was the case in the preceding year. The crop, however, germinated well and the supply of water for irrigation was generally sufficient. Injury from hot winds and the very late arrival of the monsoon was reported from a number of districts; but the damage done was serious only in the Rohilkhand and Benares divisions. The rainfall of August and September was very favourable; but abnormally heavy and continuous rain fell in the first fortnight of October in most places. November was rainless, while trifling showers fell in parts of Rohilkhand towards the end of December. The prospects of the crop somewhat deteriorated in consequence of the heavy and continuous October rain, and the strong winds which accompanied it laid the cane which flowered in places. The juice was accordingly reported to be thin and the outturn of *gur* lower than usual.

In the Panjab conditions were favourable for sowing and the monsoon rains, although somewhat delayed, were satisfactory. Excessive rain, however, caused some damage to the crop in low-lying lands, more specially in the riverain tracts of Sialkot and Amritsar. The crop also suffered from winter frosts in Ambala. In two tahsils of Gujranwala it was reported that about three-quarters of the entire crop was consumed as fodder, while in another it was damaged by insects. But nevertheless an average yield was harvested.

In the North-West Frontier Province the season was favourable throughout except in Peshawar where the matured crop suffered to a certain extent from the heavy rains in January. The canal irrigation on which the crop depends was slightly deficient in the Nowshera tahsil of that district, where owing to an aqueduct being washed away, irrigation was interrupted for six weeks.

In Madras there was a contraction in the area sown owing partly to heavy rain at sowing time, but chiefly to the fall in the price of jaggery. The condition of the crop was reported to be generally good.

1904-05

In Bengal favourable conditions prevailed at the planting season, excessive rain however damaged the crop at the early stage of its growth in many districts, while drought generally prevailed in September and October. Some damage was also done to the standing crop by late floods in East Bengal and in Muzhidabad, while the rest of the province continued to suffer from drought to the end of the season.

In the United Provinces the season was very favourable throughout. The rains in February and March favoured sowings and an extended area was sown. Germination was good and the supply of water for irrigation sufficient. The general rain in June was very opportune and greatly benefited the crop, which continued healthy and promising almost everywhere, although its full development was somewhat affected in places by insufficient rain in September. A succession of winter storms and cloudy weather in January, however, delayed pressing operations in some places.

In the Panjab general rain in March was favourable for sowings. The monsoon was late and unsatisfactory except in the south-east Panjab, but sugarcane being an irrigated crop did not suffer much from the deficiency in the rainfall. Insects appeared in Gujranwala and Sialkot, and a portion of the crop was fed to cattle. The severe frosts of January-February did harm in the North Panjab, but most of the crop had been removed before the cold wave set in. The outturn of *gur* was satisfactory.

In the North-West Frontier Province heavy rain in March interfered with sowings; but the rest of the season was favourable throughout, except that the intense cold of January-February much retarded the cutting and pressing of the cane.

In Madras a larger area than in the preceding year was placed under the crop owing to the early supply of water in the channels and the rise in the price of jaggery. The condition of the crop was reported to be generally fair.

Tables of Area and Yield

SUMMARY TABLE OF AREA AND PRODUCTION

				1891-92	1892-93	1893-94	1894-95	1895-96	1896-97
Rice	.	.	acres	49,539,031	48,358,707	49,525,300	50,002,241	49,396,747	48,021,462
			cwt	814,804,161	420,232,025	459,119,400	457,901,780	415,355,100	275,676,100
Wheat	.	.	acres	27,032,772	27,759,158	28,716,735	28,421,851	24,071,320	20,579,727
			tons	6,099,741	7,649,105	7,205,982	6,908,980	5,880,342	5,363,289
Cotton	.	.	acres	11,569,140	13,422,107	15,401,156	14,959,103	14,515,662	14,643,495
			bales (a)	2,386,376	2,318,028	2,556,537	2,239,019	2,882,042	2,651,597
Linseed	.	.	acres { pure	3,211,000	3,824,700	4,854,100	3,781,684	2,051,098	2,020,747
			mixed	515,000	601,000	503,000	603,000	560,000	315,000
		.	tons { pure	390,000	499,900	559,800	271,798	287,407	162,479
			mixed	97,000	94,000	65,000	53,699	82,462	58,501
Rape and mustard	.	.	acres { pure	1,175,100	3,674,900	3,676,000	3,582,181	3,601,913	2,910,682
			mixed	1,495,000	1,731,000	1,557,000	1,618,000	1,280,000	1,526,000
		.	tons { pure	175,272	622,580	546,216	521,031	462,034	441,814
			mixed	360,000	367,000	210,000	216,050	359,979	310,602
Sesamum	.	.	acres { pure	2,037,000	2,423,800	2,619,240	3,000,969	3,171,472	3,369,198
			mixed	551,000	107,000	509,000	418,000	560,000	672,000
		.	tons { pure	159,800	239,916	222,009	277,933	282,129	250,958
			mixed	32,000	40,000	50,000	40,000	55,000	45,000
Jute (b)	.	.	acres	...	2,135,142	2,222,600	2,264,300	2,242,700	2,196,600
			bales	...	5,717,100	5,001,700	6,141,300	5,551,000	5,717,000
Indigo	.	.	acres	...	1,218,766	1,552,008	1,688,042	1,414,002	1,608,901
			cwt	...	179,056	179,487	287,494	190,924	168,672
Earthnut (c)	.	.	acres { Bombay	...	...	...	...	...	148,726
			Madras	...	...	...	...	243,492	306,026
		.	tons , Bombay	...	...	...	...	...	...
Sugarcane	.	.	acres	...	...	...	...	...	...
			tons	...	...	...	...	...	...

(a) The production in bales for the years up to 1903-04 represents the quantities exported from India and consumed in the mills. For 1904-05 the reported estimate of production, which is greater than the total of exports and mill consumption, has been stated — see note (c) on page 38

(b) See foot notes on page 43 regarding the acreage and yield of jute

IN EACH YEAR FROM 1891-92 TO 1904-05

1897-98	1898-99	1899-1900	1900-01	1901-02	1902-03	1903 ⁻⁰⁴	1904-05		
52,205,468	52,682,050	51,969,685	48,932,493	48,511,190	51,842,390	49,461,465	51,537,842	acres	Rice
498,350,700	505,640,800	451,553,460	413,506,700	384,294,100	469,484,800	430,280,700	430,114,800	cwt	
24,537,775	25,370,078	18,687,782	23,864,550	23,446,161	23,395,277	28,413,743	28,166,706	acres	Wheat
7,208,384	6,837,674	5,357,142	7,093,529	6,090,524	7,971,446	8,641,145	7,533,841	tons	
13,683,437	14,602,892	11,884,576	14,231,150	14,506,205	16,581,016	18,012,781	19,014,432	acres	Cotton
2,653,710	3,140,130	2,093,521	2,703,648	3,310,733	3,750,549	3,579,643	3,507,068	bales (a)	
2,707,887	2,829,475	1,048,903	2,417,991	2,546,894	2,592,237	3,609,079	3,635,507	pure	Linseed
425,000	445,000	409,000	466,000	498,000	621,000	592,000	647,000	mixed	
354,994	338,610	206,220	247,024	251,808	359,568	466,832	296,035	pure	
90,876	91,281	89,461	79,000	100,113	122,000	105,000	49,000	mixed	
3,822,996	3,109,988	2,093,768	4,077,366	3,082,662	3,421,888	3,583,445	3,625,867	pure	Rape and mustard
1,459,000	1,509,000	1,381,000	1,448,000	1,461,000	2,335,000	2,429,000	2,509,000	mixed	
682,807	587,698	447,946	650,225	625,035	521,926	623,206	539,761	pure	
436,451	410,983	425,471	372,000	430,617	516,000	542,000	336,000	mixed	
3,062,109	3,530,625	3,316,067	4,052,491	3,711,711	4,435,648	4,838,164	4,213,341	pure	Sesamum
584,000	713,000	517,000	622,000	611,000	717,000	747,000	600,000	mixed	
356,817	348,118	213,256	72,356	96,210	13,587	539,478	303,924	pure	
60,000	70,000	60,000	75,000	60,000	80,000	70,000	35,000	mixed	
2,151,600	1,624,400	1,961,800	2,093,400	2,263,800	2,142,700	2,275,050	2,899,700	acres	Jute (b)
6,839,000	5,334,000	5,412,000	6,526,000	7,438,000	6,577,000	7,241,000	7,100,000	bales	
1,339,099	1,010,318	1,026,900	990,375	791,100	615,511	706,634	473,757	acres	Indigo
106,812	189,320	111,890	148,029	112,819	70,207	102,802	56,200	cwt	
120,303	301,614	71,946	64,411	96,622	69,855	89,793	60,204	Bombay	Earthnut (c)
94,500	116,200	102,000	239,097	337,600	421,300	381,400	365,900	Madras	
55,962	70,561	9,250	28,631	63,298	61,854	91,419	43,036	Bombay	
...	2,185,681	2,541,470	2,404,156	2,316,301	2,207,829	2,114,592	2,280,026	acres	Sugarcane
...	2,076,284	1,860,005	2,276,748	2,022,476	1,900,784	1,871,986	2,166,156	tons	

(a) The yield of earthnut in Madras has not been satisfactorily determined
 Note.—The figures for 1901-05 are subject to revision

RICE

PROVINCE			acres	cwt	PROVINCE			acres	cwt
<i>Bengal</i>					<i>Burma</i>				
1891-92	.	.	39,552,008	284,801,161	1891-92	.	.	4,215,028	(a)
1892-93	.	.	37,324,307	333,956,225	1892-93	.	.	4,625,000	50,346,000
1893-94	.	.	37,886,500	374,227,800	1893-94	.	.	4,928,600	47,874,000
1894-95	.	.	38,639,500	416,857,200	1894-95	.	.	4,793,341	45,381,980
1895-96	.	.	37,447,600	317,514,600	1895-96	.	.	5,068,147	41,481,000
1896-97	.	.	36,177,400	179,637,400	1896-97	.	.	5,224,062	47,679,000
1897-98	.	.	39,549,500	398,142,000	1897-98	.	.	5,720,766	52,217,000
1898-99	.	.	39,605,400	405,842,900	1898-99	.	.	5,910,650	44,851,000
1899-1900	.	.	39,490,500	357,956,360	1899-1900	.	.	6,050,135	54,100,000
1900-01	.	.	36,013,900	311,508,600	1900-01	.	.	6,326,993	52,975,000
1901-02	.	.	35,094,800	272,201,900	1901-02	.	.	6,558,190	60,602,000
1902-03	.	.	37,553,700	353,977,300	1902-03	.	.	6,553,890	53,022,000
1903-04	.	.	34,931,500	316,669,700	1903-04	.	.	6,761,665	64,411,000
1904-05	.	.	37,895,200	331,977,100	1904-05	.	.	6,820,542	60,735,000
<i>Madræs</i>					<i>Total</i>				
1891-92	.	.	5,771,000	30,000,200	1891-92	.	.	49,589,031	314,801,161
1892-93	.	.	6,408,200	35,980,400	1892-93	.	.	48,558,707	420,282,625
1893-94	.	.	6,710,200	37,017,600	1893-94	.	.	49,525,300	459,119,400
1894-95	.	.	6,569,400	35,663,600	1894-95	.	.	50,002,241	497,901,780
1895-96	.	.	6,881,000	56,359,500	1895-96	.	.	49,896,747	415,355,100
1896-97	.	.	6,620,000	48,359,700	1896-97	.	.	48,021,462	275,876,100
1897-98	.	.	6,935,200	47,991,700	1897-98	.	.	52,205,466	498,350,700
1898-99	.	.	7,166,000	51,946,700	1898-99	.	.	52,682,050	505,642,600
1899-1900	.	.	6,429,000	39,437,100	1899-1900	.	.	51,969,635	451,553,480
1900-01	.	.	6,591,600	49,023,100	1900-01	.	.	48,932,493	413,506,700
1901-02	.	.	6,858,200	51,490,200	1901-02	.	.	48,511,100	381,394,100
1902-03	.	.	7,784,800	57,425,500	1902-03	.	.	51,842,390	469,484,800
1903-04	.	.	7,766,800	58,200,000	1903-04	.	.	49,461,465	439,280,700
1904-05	.	.	6,823,100	43,402,700	1904-05	.	.	51,537,842	436,114,800

(a) Not stated

Note.—The figures for 1904-05 are subject to revision

WHEAT

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Panjab and N.-W. Frontier</i>			<i>Bengal</i>		
1891-92	6,228,600	1,419,765	1891-92	1,800,000	250,000
1892-93	7,123,300	2,235,011	1892-93	1,559,000	468,000
1893-94	8,265,200	2,560,341	1893-94	1,401,000	459,000
1894-95	8,051,800	2,896,353	1894-95	1,413,000	686,800
1895-96	6,899,400	1,753,766	1895-96	1,427,400	345,600
1896-97	6,584,800	1,872,086	1896-97	1,341,700	386,600
1897-98	8,013,800	2,356,975	1897-98	1,569,500	692,600
1898-99	7,729,200	1,977,777	1898-99	1,582,500	656,400
1899-1900	6,366,500	1,823,183	1899-1900	1,550,300	672,700
1900-01	8,766,400	2,940,602	1900-01	1,498,700	472,600
1901-02	8,023,600	2,005,611	1901-02	1,408,300	391,500
1902-03	7,818,100	2,549,308	1902-03	1,417,000	485,900
1903-04	8,759,762	3,377,255	1903-04	1,508,600	627,800
1904-05	8,591,279	3,122,990	1904-05	1,455,500	444,100
<i>United Provinces</i>			<i>Dombay (including Native States)</i>		
1891-92	6,502,097	3,035,229	1891-92	2,176,000	426,000
1892-93	6,807,227	2,354,256	1892-93	2,475,000	654,000
1893-94	6,674,839	1,854,605	1893-94	2,525,000	762,000
1894-95	6,333,688	1,469,996	1894-95	2,678,665	741,061
1895-96	5,177,261	1,591,294	1895-96	2,288,838	454,865
1896-97	3,931,710	1,850,914	1896-97	1,446,741	288,002
1897-98	5,085,146	2,249,533	1897-98	2,004,832	627,914
1898-99	6,318,088	2,277,414	1898-99	2,470,998	737,385
1899-1900	6,202,926	2,410,032	1899-1900	1,167,077	99,408
1900-01	6,790,440	2,394,605	1900-01	1,483,810	298,479
1901-02	6,461,729	2,401,940	1901-02	1,510,459	179,084
1902-03	6,909,549	2,972,497	1902-03	1,797,215	632,601
1903-04	7,788,753	3,230,018	1903-04	2,174,076	660,279
1904-05	7,667,453	1,897,017	1904-05	2,115,345	345,404
<i>Central Provinces</i>			<i>Derar</i>		
1891-92	3,004,000	760,000	1891-92	898,000	136,055
1892-93	4,197,000	762,000	1892-93	985,000	166,895
1893-94	3,986,000	575,000	1893-94	928,000	170,898
1894-95	3,893,349	502,275	1894-95	889,326	150,232
1895-96	2,714,454	368,038	1895-96	747,025	103,081
1896-97	1,950,623	332,645	1896-97	391,425	23,413
1897-98	2,171,714	643,095	1897-98	390,378	41,983
1898-99	2,505,299	456,169	1898-99	436,862	53,571
1899-1900	1,633,070	201,303	1899-1900	17,010	414
1900-01	2,035,736	440,900	1900-01	213,554	29,000
1901-02	2,620,139	571,010	1901-02	230,085	34,385
1902-03	2,281,908	600,589	1902-03	216,955	34,625
1903-04	2,921,161	751,383	1903-04	452,668	70,659
1904-05	3,080,111	760,847	1904-05	427,388	88,205

Note.—The figures for 1904-05 are subject to revision

WHEAT—continued

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Sind (including Native States)</i>			<i>Hyderabad (c)</i>		
1891-92 . . .	488,000	117,000	1891-92 . . .	1,942,824	96,238
1892-93 . . .	604,000	204,000	1892-93 . . .	1,262,506	97,315
1893-94 . . .	531,000	161,000	1893-94 . . .	1,162,503	109,234
1894-95 . . .	673,251	215,361	1894-95 . . .	1,412,562	69,413
1895-96 . . .	315,559	71,683	1895-96 . . .	1,454,451	85,331
1896-97 . . .	406,752	116,470	1896-97 . . .	772,990	18,585
1897-98 . . .	591,621	177,160	1897-98 . . .	1,003,175	30,139
1898-99 . . .	869,706	81,231	1898-99 . . .	1,113,431	33,098
1899-1900 . . .	364,522	68,226	1899-1900 . . .	339,136	1,538
1900-01 . . .	479,487	123,160	1900-01 . . .	636,247	12,270
1901-02 . . .	534,004	109,009	1901-02 . . .	603,182	33,853
1902-03 . . .	331,608	75,087	1902-03 . . .	614,092	53,724
1903-04 . . .	586,895	202,171	1903-04 . . .	1,134,769	100,535
1904-05 . . .	510,925	123,730	1904-05 . . .	1,126,642	89,662
<i>Rajputana</i>			<i>Mysore</i>		
1891-92 . . .	1,471,000	362,000	1891-92 . . .	2,125	154
1892-93 . . .	1,601,000	431,000	1892-93 . . .	2,640	189
1893-94 . . .	1,646,000	389,000	1893-94 . . .	(d)	(d)
1894-95 . . .	1,529,146	368,168	1894-95 . . .	4,534	304
1895-96 . . .	1,306,868	315,573	1895-96 . . .	5,456	363
1896-97 . . .	1,374,346	233,932	1896-97 . . .	3,871	413
1897-98 . . .	1,302,233	307,062	1897-98 . . .	4,363	331
1898-99 . . .	1,196,014	276,388	1898-99 . . .	4,029	492
1899-1900 . . .	360,733	79,239	1899-1900 . . .	2,758	251
1900-01 . . .	713,290	170,682	1900-01 . . .	2,556	197
1901-02 . . .	541,334	103,869	1901-02 . . .	3,714	256
1902-03 . . .	813,399	130,441	1902-03 . . .	5,123	531
1903-04 . . .	1,125,277	297,162	1903-04 . . .	5,718	630
1904-05 . . .	1,023,773	188,981	1904-05 . . .	5,326	447
<i>Central India</i>			<i>Total</i>		
1891-92 . . .	2,040,126	(a) 491,300	1891-92 . . .	27,032,772	6,093,741
1892-93 (b) . . .	1,639,485	278,340	1892-93 . . .	27,759,158	7,649,105
1893-94 (b) . . .	1,537,143	227,810	1893-94 . . .	28,716,735	7,268,982
1894-95 . . .	2,042,531	396,567	1894-95 . . .	28,421,851	6,998,930
1895-96 . . .	1,740,608	290,745	1895-96 . . .	24,071,320	5,380,342
1896-97 . . .	1,366,269	179,919	1896-97 . . .	20,579,727	5,363,230
1897-98 . . .	1,501,013	279,492	1897-98 . . .	24,537,775	7,208,334
1898-99 . . .	1,613,851	287,749	1898-99 . . .	25,370,078	6,337,674
1899-1900 . . .	692,950	100,276	1899-1900 . . .	18,687,782	5,357,142
1900-01 . . .	1,244,330	220,116	1900-01 . . .	23,864,550	7,093,527
1901-02 . . .	1,459,116	255,027	1901-02 . . .	23,446,161	6,090,524
1902-03 . . .	1,182,298	403,943	1902-03 . . .	23,395,277	7,971,446
1903-04 . . .	1,956,069	523,855	1903-04 . . .	28,413,743	8,641,145
1904-05 . . .	2,171,019	472,658	1904-05 . . .	28,166,706	7,533,841

(a) Revised estimate (b) Incomplete
(d) No information

(c) The figures for the years previous to 1902-03 exclude jagir areas
Note.—The figures for 1901-05 are subject to revision

COTTON

PROVINCE	acres	bales of 400 lb	PROVINCE	acres	bales of 400 lb
<i>Bombay (including Native States)</i>			<i>Hyderabad (d)</i>		
1891-92	5,171,702	782,180	1892-93	1,384,450	168,004
1892-93	5,286,411	1,044,928	1893-94	1,456,288	147,199
1893-94	5,910,856	1,023,480	1894-95	1,611,912	117,277
1894-95	5,292,717	880,240	1895-96	1,492,768	173,233
1895-96	5,303,598	1,029,455	1896-97	1,558,296	137,152
1896-97	5,033,549	827,819	1897-98	1,653,669	163,449
1897-98	4,751,103	948,514	1898-99	1,738,379	222,302
1898-99	5,098,145	1,232,861	1899-1900	1,292,329	91,975
1899-1900	3,095,206	(a) 81,617	1900-01	1,698,836	288,570
1900-01	4,240,140	759,096	1901-02	1,689,139	300,301
1901-02	4,394,796	567,386	1902-03	2,359,130	280,267
1902-03	4,786,657	943,827	1903-04	2,660,713	275,203
1903-04	5,701,964	1,059,481	1904-05	2,730,686	281,957
1904-05	5,065,696	676,155			
<i>Berar (b)</i>			<i>United Provinces</i>		
1891-92	2,244,000	345,566	1891-92	1,011,985	163,997
1892-93	2,186,600	262,879	1892-93	837,892	161,881
1893-94	2,184,800	291,597	1893-94	1,069,307	296,643
1894-95	2,102,956	255,628	1894-95	1,214,747	198,333
1895-96	2,071,856	451,280	1895-96	1,060,905	280,414
1896-97	2,306,870	335,576	1896-97	1,150,069	260,521
1897-98	2,150,329	439,980	1897-98	919,671	225,478
1898-99	2,476,806	617,222	1898-99	933,395	261,304
1899-1900	1,983,602	104,603	1899-1900	996,673	227,787
1900-01	2,521,651	730,962	1900-01	1,046,176	204,169
1901-02	2,689,201	612,344	1901-02	1,153,870	368,638
1902-03	2,765,335	710,668	1902-03	1,239,131	327,728
1903-04	2,851,222	485,696	1903-04	841,417	183,540
1904-05	3,069,730	726,251	1904-05	1,203,430	366,561
<i>Madras (c)</i>			<i>Panjab and N.-W. Frontier</i>		
1891-92	1,243,000	80,000	1891-92	539,900	118,195
1892-93	1,326,200	103,600	1892-93	948,300	200,888
1893-94	1,724,000	121,200	1893-94	1,124,500	231,997
1894-95	1,521,500	106,960	1894-95	1,161,200	241,667
1895-96	1,623,900	120,524	1895-96	1,176,700	204,806
1896-97	1,395,400	104,655	1896-97	1,128,400	223,947
1897-98	1,509,100	118,876	1897-98	788,600	166,707
1898-99	1,321,700	127,670	1898-99	988,400	138,926
1899-1900	1,382,700	101,440	1899-1900	1,215,400	205,203
1900-01	1,373,300	118,320	1900-01	1,080,200	219,646
1901-02	1,351,200	130,130	1901-02	1,057,200	220,225
1902-03	1,580,900	167,109	1902-03	1,221,000	236,425
1903-04	1,664,700	174,922	1903-04	1,241,000	269,665
1904-05	1,809,700	136,560	1904-05	1,629,003	373,202

(a) The estimate for the year is too low, as the mill consumption for the year ending the 30th June and the net exports for the year ending the 30th September were 605,000 bales. For both the preceding and the following years the trade figures are however lower than the estimates, so that for the 3 years 1898-1901 the production would seem to be understated only by 109,000 bales. In this calculation the excess of the exports from the districts of the North and East Deccan over their reported production, which averages 208,000 bales in the twelve years 1891-1903, has been taken to represent imports by road into the Presidency from the neighbouring Native States.

(b) The figures of production for Berar for the years previous to 1903-04 represent the mill consumption for the year ending the 30th June and the exports for the year ending the 30th September, as the provincial estimates of the outturn were extremely defective.

(c) The estimates for Madras have hitherto excluded the *zamindari* tracts where a large amount of cotton is cultivated. No agricultural statistics are available for these areas, but it was roughly estimated in 1901-02 that that season's yield, which was taken at two-thirds of the normal, would be about 52,250 bales.

(d) The figures for the years previous to 1902-03 exclude *jagir* areas.

Note.—The figures for 1904-05 are subject to revision.

COTTON—continued

PROVINCE			acres	bales of 400 lb	PROVINCE			acres	bales of 400 lb
Central Provinces					Burma				
1891-92	.	.	738,000	52,000	1898-99	.	167,821		
1892-93	.	.	652,200	85,900	1899-1900	.	148,563	32,900	
1893-94	.	.	690,700	79,600	1900-01	.	141,718	21,077	
1894-95	.	.	601,984	81,196	1901-02	.	130,610	13,125	
1895-96	.	.	541,087	105,940	1902-03	.	148,867	21,114	
1896-97 (a)	.	.	718,186	86,950	1903-04	.	165,154	27,487	
1897-98	.	.	668,847	118,994	1904-05	.	188,921	37,187	
1898-99	.	.	668,522	165,169	Bengal				
1899-1900	.	.	712,836	117,050	1892-93	.	229,900	73,612	
1900-01	.	.	1,004,812	263,058	1893-94	.	215,000	59,428	
1901-02	.	.	981,342	267,737	1894-95	.	206,200	63,871	
1902-03	.	.	1,136,431	260,798	1895-96	.	197,900	53,356	
1903-04	.	.	1,292,297	273,473	1896-97	.	157,100	40,164	
1904-05	.	.	1,540,604	409,606	1897-98	.	174,000	52,590	
Rajputana					1898-99	.	167,900	45,560	
1891-92	.	.	517,000	117,000	1899-1900	.	160,600	39,705	
1892-93	.	.	500,400	133,300	1900-01	.	127,700	41,262	
1893-94 (c)	.	.	617,600	171,700	1901-02	.	118,500	32,094	
1894-95	.	.	619,362	184,898	1902-03	.	100,300	29,366	
1895-96	.	.	514,854	160,862	1903-04	.	95,800	23,112	
1896-97	.	.	549,236	145,492	1904-05	.	89,800	25,303	
1897-98	.	.	542,435	137,669	Assam				
1898-99	.	.	478,604	117,743	1903-04	.	31,000	11,500	
1899-1900	.	.	325,033	44,161	1904-05	.	32,000	14,000	
1900-01	.	.	360,384	104,300	Mysore				
1901-02	.	.	281,934	87,858	1903-04	.	58,222	9,555	
1902-03	.	.	456,503	164,142	1904-05	.	68,783	12,553	
1903-04	.	.	394,795	113,365	Ajmer-Merwara				
1904-05	.	.	463,573	181,313	1903-04	.	33,111	13,320	
Central India					1904-05	.	51,649	21,687	
1893-94 (d)	.	.	295,300	31,900	Total				
1894-95	.	.	512,936	38,000					
1895-96	.	.	420,239	49,500					
1896-97	.	.	522,683	45,900					
1897-98	.	.	417,456	60,600					
1898-99	.	.	471,408	46,800					
1899-1900	.	.	479,565	23,100					
1900-01	.	.	542,673	63,900					
1901-02	.	.	524,094	72,200					
1902-03	.	.	591,006	115,378					
1903-04	.	.	772,173	124,727					
1904-05	.	.	843,481	143,662					
Sind (including Native States)									
1891-92	.	.	103,553	36,677					
1892-93	.	.	69,754	37,784					
1893-94	.	.	115,810	75,081					
1894-95	.	.	113,589	55,141					
1895-96	.	.	111,855	51,018					
1896-97	.	.	123,706	56,694					
1897-98	.	.	108,227	40,176					
1898-99	.	.	92,312	39,712					
1899-1900	.	.	92,069	20,507					
1900-01	.	.	84,560	43,031					
1901-02	.	.	129,409	72,553					
1902-03	.	.	195,486	110,808					
1903-04	.	.	209,213	115,154					
1904-05	.	.	227,377	100,671					

(a) Exclusive of zamindari area in Raipur, Bilaspur, and Sambalpur

(c) Exclusive of Tonk

(b) Represent exports and consumption of the years ending the 30th September as the reported estimates of the yield were imperfect

(d) Exclusive of the greater part of the Bhopal Agency

(e) For the years up to 1903-04 the exports are for the year ending the 30th September and the mill consumption for the year ending the 30th June. For 1904-05 both the exports and the mill consumption are for the year ending 30th June. No reliable information exists as to the annual consumption outside the mills but a million cwt or 280,000 bales is probably below the mark. The deficiency in the total of the estimates compared with the quantities exported and consumed which is especially noticeable in the year 1899-1900 cannot be satisfactorily allocated, but it is probable that the remaining errors are chiefly in the estimates of Native States

Note.—The figures for 1904-05 are subject to revision

LINSEED

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Bengal</i>			<i>Berar(c)</i>		
1892-93 . . .	805,700	121,900	1891-92 . . .	364,000	35,000
1893-94 . . .	777,100	131,800	1892-93 . . .	354,000	21,000
1894-95 . . .	732,800	120,900	1893-94 . . .	578,000	29,000
1895-96 . . .	712,700	95,600	1894-95 . . .	385,568	13,893
1896-97 . . .	587,800	84,000	1895-96 . . .	500,650	27,497
1897-98 . . .	662,800	125,400	1896-97 . . .	188,142	4,576
1898-99 . . .	677,900	144,700	1897-98 . . .	180,472	10,405
1899-1900 . . .	653,200	126,700	1898-99 . . .	171,085	7,683
1900-01 . . .	806,700	133,400	1899-1900 . . .	21,561	—
1901-02 . . .	783,800	110,600	1900-01 . . .	154,716	5,352
1902-03 . . .	864,200	160,000	1901-02 . . .	185,738	9,606
1903-04 . . .	922,800	168,800	1902-03 . . .	120,753	7,389
1904-05 . . .	815,730	111,500	1903-04 . . .	184,823	18,617
<i>United Provinces</i>			1904-05 . . .	113,202	11,061
1891-92 (a) { Pure . . .	622,000	110,000	<i>Dombay (including Native States)</i>		
1892-93 { Mixed . . .	545,000	97,000	1891-92 . . .	270,000	19,000
1893-94 { Pure . . .	491,000	74,000	1892-93 . . .	239,000	25,000
1894-95 { Mixed . . .	604,000	94,000	1893-94 . . .	402,000	52,000
1895-96 { Pure . . .	742,000	101,000	1894-95 . . .	410,692	25,503
1896-97 { Mixed . . .	508,000	65,000	1895-96 . . .	606,428	63,261
1897-98 { Pure . . .	753,857	69,165	1896-97 . . .	157,783	2,221
1898-99 { Mixed . . .	408,000	53,899	1897-98 . . .	223,396	23,646
1899-1900 { Pure . . .	403,565	55,796	1898-99 . . .	277,462	23,975
1900-01 { Mixed . . .	560,000	82,462	1899-1900 . . .	137,356	428
1901-02 { Pure . . .	235,166	40,036	1900-01 . . .	141,321	3,036
1902-03 { Mixed . . .	345,000	58,504	1901-02 . . .	224,002	4,537
1903-04 { Pure . . .	519,161	110,619	1902-03 . . .	198,544	12,959
1904-05 { Mixed . . .	425,000	90,970	1903-04 . . .	381,374	31,322
1891-92 { Pure . . .	428,728	87,854	1904-05 . . .	449,264	21,511
1892-93 { Mixed . . .	445,000	91,284	<i>Rest of India</i>		
1893-94 { Pure . . .	357,830	73,267	1891-92 . . .	567,000	114,000
1894-95 { Mixed . . .	409,000	80,464	1892-93 . . .	567,000	114,000
1895-96 { Pure . . .	448,203	75,780	1893-94 . . .	567,000	114,000
1896-97 { Mixed . . .	486,000	79,000	<i>Total</i>		
1897-98 { Pure . . .	373,002	75,576	1891-92 { Pure . . .	3,211,000	390,000
1898-99 { Mixed . . .	498,000	160,113	1892-93 { Mixed . . .	315,000	97,000
1899-1900 { Pure . . .	696,011	114,595	1893-94 { Pure . . .	3,824,700	439,900
1900-01 { Mixed . . .	621,000	122,000	1894-95 { Mixed . . .	501,000	94,000
1901-02 { Pure . . .	782,302	144,736	1895-96 { Pure . . .	4,354,100	559,300
1902-03 { Mixed . . .	592,000	105,000	1896-97 { Mixed . . .	503,000	65,000
1903-04 { Pure . . .	661,848	51,795	1897-98 { Pure . . .	3,781,684	271,798
1904-05 { Mixed . . .	647,000	49,000	1898-99 { Mixed . . .	603,000	63,599
<i>Central Provinces</i>			1899-1900 { Pure . . .	2,951,003	287,407
1891-92 . . .	1,388,000	112,000	1900-01 { Mixed . . .	500,000	84,463
1892-93 . . .	1,384,000	134,000	1901-02 { Pure . . .	3,023,747	162,479
1893-94 . . .	1,788,000	132,000	1902-03 { Mixed . . .	345,000	58,540
1894-95 . . .	1,193,672	42,532	1903-98 { Pure . . .	2,707,887	354,994
1895-96 . . .	730,750	45,253	1897-98 { Mixed . . .	425,000	90,976
1896-97 . . .	527,421	19,391	1898-99 { Pure . . .	3,829,475	386,010
1897-98 . . .	683,728	69,783	1899-1900 { Mixed . . .	415,000	91,284
1898-99 . . .	838,255	58,955	1900-01 { Pure . . .	1,618,903	206,220
1899-1900 . . .	308,933	4,319	1901-02 { Mixed . . .	409,000	59,464
1900-01 . . .	495,165	20,852	1902-03 { Pure . . .	2,417,991	217,024
1901-02 . . .	609,596	32,786	1903-04 { Mixed . . .	466,000	79,000
1902-03 . . .	494,137	42,352	1904-05 { Pure . . .	2,546,001	251,803
1903-04 . . .	808,566	77,567	1905-06 { Mixed . . .	495,000	100,113
1904-05 . . .	820,699	60,695	1906-07 { Pure . . .	2,592,237	339,668
<i>Hyderabad (b)</i>			1907-98 { Mixed . . .	621,000	122,000
1891-92 . . .	321,455	11,955	1908-04 { Pure . . .	3,609,079	466,832
1892-93 . . .	438,030	15,141	1909-05 { Mixed . . .	592,000	105,000
1893-94 . . .	426,015	13,413	1904-05 { Pure . . .	3,085,507	286,035
1894-95 . . .	171,070	1,506	1905-06 { Mixed . . .	617,000	39,000
1895-96 . . .	371,963	8,774			
1896-97 . . .	370,876	18,103			
1897-98 . . .	378,556	32,343			
1898-99 . . .	529,214	25,290			
1899-1900 . . .	775,794	33,473			

(a) "Pure" means seed sown by itself; "mixed" means seed sown in the same fields with other crops. The estimates of the n

(b) The figures for the years previous to 1902-03 exclude jagir areas

(c) The estimates of yield for the years previous to 1903-04 are defective being based on incorrect data

The figures for 1904-05 are subject to revision

RAPE AND MUSTARD

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Bengal</i>			<i>Sind (including Native States)</i>		
1892-98	2,256,000	372,300	1891-92	189,000	22,000
1893-94	2,209,100	331,200	1892-93	140,000	20,000
1894-95	2,221,600	343,700	1893-94	111,000	17,000
1895-96	2,148,400	332,400	1894-95	222,413	24,852
1896-97	2,008,900	312,300	1895-96	53,664	8,503
1897-98	2,239,700	438,600	1896-97	72,093	11,101
1898-99	2,167,200	448,200	1897-98	154,248	27,277
1899-1900	2,032,900	371,900	1898-99	70,766	8,601
1900-01	2,048,200	337,800	1899-1900	64,637	6,193
1901-02	1,922,400	372,900	1900-01	119,596	12,304
1902-03	1,914,100	341,700	1901-02	113,140	12,049
1903-04	1,973,900	365,500	1902-03	78,806	7,813
1904-05	1,961,200	358,800	1903-04	85,525	10,550
			1904-05	63,268	2,959
<i>Panjab and N.-W. Frontier</i>			<i>Bombay (including Native States)</i>		
1891-92	594,100	68,272	1891-92	44,000	7,000
1892-93	849,900	134,720	1892-93	65,000	13,000
1893-94	899,900	112,016	1893-94	89,000	18,000
1894-95	802,600	97,224	1894-95	91,822	18,509
1895-96	475,100	50,602	1895-96	49,431	7,617
1896-97	515,300	52,756	1896-97	55,615	8,207
1897-98	1,112,300	142,115	1897-98	56,830	14,390
1898-99	582,600	56,041	1898-99	53,091	9,705
1899-1900	397,500	26,761	1899-1900	2,536	111
1900-01	1,638,400	248,022	1900-01	39,134	6,613
1901-02	739,500	73,084	1901-02	17,438	1,721
1902-03	1,047,000	105,008	1902-03	54,625	7,891
1903-04	1,169,131	176,363	1903-04	36,007	5,786
1904-05	1,266,519	127,671	1904-05	24,227	2,892
<i>Assam</i>			<i>Hyderabad (b)</i>		
1891-92	168,000	36,000	1896-97	1,994	73
1892-93	170,000	45,000	1897-98	3,828	140
1893-94	168,000	34,000	1898-99	8,796	286
1894-95	134,399	20,249	1899-1900	905	6
1895-96	182,610	36,388	1900-01	16,597	286
1896-97	178,403	38,853	1901-02	12,077	146
1897-98	167,268	31,878	1902-03	12,537	289
1898-99	134,856	21,891	1903-04	14,017	266
1899-1900	119,110	21,789	1904-05	12,993	218
1900-01	126,309	21,140			
1901-02	157,871	28,294	<i>Rest of India</i>		
1902-03	174,719	27,905	1891-92	68,000	10,000
1903-04	172,039	29,098	1892-93	68,000	10,000
1904-05	159,524	28,411	1893-94	68,000	10,000
<i>United Provinces</i>			<i>Total</i>		
1891-92 (a) { Pure	132,000	32,000	1891-92 { Pure	1,175,100	175,272
{ Mixed	1,495,000	360,000	{ Mixed	1,495,000	360,000
1892-93 { Pure	126,000	27,000	{ Pure	3,674,900	622,580
{ Mixed	1,731,000	367,000	1892-93 { Mixed	1,731,000	367,000
1893-94 { Pure	131,000	21,000	{ Pure	3,676,000	546,216
{ Mixed	1,557,000	240,000	1893-94 { Mixed	1,557,000	240,000
1894-95 { Pure	109,347	16,497	1894-95 { Pure	3,582,181	521,031
{ Mixed	1,613,000	216,050	{ Mixed	1,613,000	216,050
1895-96 { Pure	95,678	26,554	1895-96 { Pure	3,004,913	462,064
{ Mixed	1,290,000	359,979	{ Mixed	1,290,000	359,979
1896-97 { Pure	88,372	18,524	1896-97 { Pure	2,910,682	441,814
{ Mixed	1,526,000	340,602	{ Mixed	1,526,000	340,602
1897-98 { Pure	88,822	28,417	1897-98 { Pure	3,822,996	682,807
{ Mixed	1,459,000	436,451	{ Mixed	1,459,000	436,451
1898-99 { Pure	92,679	22,884	1898-99 { Pure	3,109,988	567,698
{ Mixed	1,508,000	410,983	{ Mixed	1,509,000	410,983
1899-1900 { Pure	76,180	21,186	1899-1900 { Pure	2,693,768	447,900
{ Mixed	1,381,000	425,471	{ Mixed	1,381,000	425,471
1900-01 { Pure	94,130	24,080	1900-01 { Pure	4,077,366	655,000
{ Mixed	1,440,000	372,000	{ Mixed	1,449,000	372,000
1901-02 { Pure	120,436	36,811	1901-02 { Pure	3,082,662	462,064
{ Mixed	1,461,000	430,617	{ Mixed	1,461,000	430,617
1902-03 { Pure	140,296	31,320	1902-03 { Pure	3,421,883	521,031
{ Mixed	2,335,000	516,000	{ Mixed	2,335,000	516,000
1903-04 { Pure	131,926	29,643	1903-04 { Pure	3,533,415	567,698
{ Mixed	2,429,000	512,000	{ Mixed	2,429,000	512,000
1904-05 { Pure	135,436	18,813	1904-05 { Pure	3,625,867	567,698
{ Mixed	2,509,000	396,000	{ Mixed	2,509,000	396,000

(a) "Pure" means seed sown by itself; "mixed" means seed sown in the same fields with other crops. The of the mixed crop of the United Provinces are highly conjectural; hence they have been kept separate

(b) The figures for the years previous to 1902-03 exclude jagir areas

Note.—The figures for 1904-05 are subject to revision

SESAMUM

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Madras</i>			<i>Panjab and N.W. Frontier (a)</i>		
1891-92	501,000	26,700	1891-92	122,000	15,000
1892-93	635,600	46,300	1892-93	204,500	25,900
1893-94	717,500	51,300	1893-94	234,800	25,900
1894-95	613,600	40,700	1894-95	319,200	31,917
1895-96	824,700	54,700	1895-96	189,400	18,772
1896-97	562,800	48,100	1896-97	223,400	21,379
1897-98	826,000	69,000	1897-98	195,400	22,984
1898-99	690,700	68,100	1898-99	252,600	25,350
1899-1900	665,900	45,100	1899-1900	210,400	16,253
1900-01	850,000	68,200	1900-01	218,500	19,077
1901-02	727,700	66,400	1901-02	211,500	17,640
1902-03	782,700	71,700	1902-03	244,000	20,819
1903-04	855,770	78,600	1903-04	246,600	26,143
1904-05	685,100	56,300	1904-05	158,900	15,896
<i>Bombay (including Native States)</i>			<i>Sind (including Native States)</i>		
1891-92	590,000	79,000	1891-92	103,000	(b) 7,800
1892-93	703,500	105,600	1892-93	109,500	10,516
1893-94	668,800	78,900	1893-94	177,740	12,309
1894-95	754,072	100,438	1894-95	191,010	15,892
1895-96	848,039	98,101	1895-96	151,038	12,052
1896-97	770,553	65,600	1896-97	183,878	12,384
1897-98	681,905	103,136	1897-98	154,812	8,260
1898-99	754,327	115,500	1898-99	114,129	8,285
1899-1900	303,148	6,180	1899-1900	158,957	7,323
1900-01	719,042	105,167	1900-01	105,881	4,468
1901-02	802,935	64,431	1901-02	99,698	5,985
1902-03	904,523	177,137	1902-03	118,044	7,602
1903-04	1,125,055	218,210	1903-04	122,406	5,665
1904-05	765,932	51,850	1904-05	88,782	5,558
<i>Central Provinces</i>			<i>Berar (c)</i>		
1891-92	456,000	17,000	1891-92	123,000	6,300
1892-93	503,000	33,000	1892-93	115,100	4,000
1893-94	531,700	31,300	1893-94	85,300	3,200
1894-95	520,099	27,714	1894-95	69,715	2,359
1895-96	509,407	45,243	1895-96	76,155	2,701
1896-97	627,948	43,953	1896-97	103,298	3,515
1897-98	749,401	67,770	1897-98	135,164	6,573
1898-99	631,268	43,475	1898-99	135,433	5,620
1899-1900	1,026,257	62,133	1899-1900	116,089	1,436
1900-01	983,260	82,138	1900-01	149,022	9,554
1901-02	710,541	39,020	1901-02	118,249	2,958
1902-03	1,075,057	96,610	1902-03	138,092	5,402
1903-04	962,296	73,551	1903-04	121,551	11,630
1904-05	940,421	60,925	1904-05	111,716	10,134

a area and yield for 1904-05 relate to Panjab only, the forecast of the sesamum crop of the been discontinued from that year

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hold for the years previous to 1903-04 are defective, being based on incorrect data
1904-05 are subject to revision

SESAMUM—concluded

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Bengal</i>			<i>Hyderabad (b)</i>		
1894-95 . . .	356,200	43,400	1896-97 . . .	387,011	13,005
1895-96 . . .	368,900	36,000	1897-98 . . .	404,020	18,200
1896-97 . . .	332,500	30,800	1898-99 . . .	426,740	14,468
1897-98 . . .	367,500	49,900	1899-1900 . . .	237,512	2,383
1898-99 . . .	367,200	52,100	1900-01 . . .	392,032	10,421
1899-1900 . . .	388,200	49,700	1901-02 . . .	377,023	21,660
1900-01 . . .	396,000	45,400	1902-03 . . .	472,282	34,038
1901-02 . . .	411,100	54,900	1903-04 . . .	601,607	38,325
1902-03 . . .	384,800	45,000	1904-05 . . .	780,023	29,452
1903-04 . . .	428,800	58,000			
1904-05 . . .	414,200	50,900			
<i>United Provinces</i>			<i>Total</i>		
1891-92 (a) { Pure . . .	142,000	8,000	1891-92 { Pure . . .	2,037,000	159,800
{ Mixed . . .	551,000	32,000	{ Mixed . . .	551,000	32,000
1892-93 { Pure . . .	152,600	14,700	{ Pure . . .	2,423,800	239,916
{ Mixed . . .	407,000	40,000	{ Mixed . . .	407,000	40,000
1893-94 { Pure . . .	200,600	19,700	{ Pure . . .	2,619,240	222,609
{ Mixed . . .	509,000	50,000	{ Mixed . . .	509,000	50,000
1894-95 { Pure . . .	177,043	15,513	{ Pure . . .	3,000,969	277,933
{ Mixed . . .	448,000	40,000	{ Mixed . . .	448,000	40,000
1895-96 { Pure . . .	148,838	14,554	{ Pure . . .	3,171,472	232,129
{ Mixed . . .	560,000	55,000	{ Mixed . . .	560,000	55,000
1896-97 { Pure . . .	177,785	12,222	{ Pure . . .	3,369,198	250,958
{ Mixed . . .	672,000	45,000	{ Mixed . . .	672,000	45,000
1897-98 { Pure . . .	147,817	14,994	{ Pure . . .	3,662,109	355,817
{ Mixed . . .	584,000	60,000	{ Mixed . . .	584,000	60,000
1898-99 { Pure . . .	155,178	15,159	{ Pure . . .	3,530,625	318,118
{ Mixed . . .	713,000	70,000	{ Mixed . . .	713,000	70,000
1899-1900 { Pure . . .	203,604	22,743	{ Pure . . .	3,316,067	213,256
{ Mixed . . .	517,000	60,000	{ Mixed . . .	517,000	60,000
1900-01 { Pure . . .	238,154	28,431	{ Pure . . .	4,052,491	372,549
{ Mixed . . .	622,000	75,000	{ Mixed . . .	622,000	75,642
1901-02 { Pure . . .	252,870	23,226	{ Pure . . .	3,711,711	390,413
{ Mixed . . .	611,000	60,000	{ Mixed . . .	611,000	
1902-03 { Pure . . .	316,150	35,279	{ Pure . . .	3,511,600	
{ Mixed . . .	717,000	80,000	{ Mixed . . .	21,883	
1903-04 { Pure . . .	374,559	34,345	{ Pure . . .	4,335,000	
{ Mixed . . .	747,000	70,000	{ Mixed . . .	88,445	
1904-05 { Pure . . .	268,564	13,900	{ Pure . . .	4,29,000	
{ Mixed . . .	600,000	35,000	{ Mixed . . .	25,867	
				09,000	

(a) "Pure" means seed sown by itself; "mixed" means seed sown in the same fields with oil of the mixed crop of the United Provinces are highly conjectural; hence they have been kept separate.

(b) The figures for the years previous to 1902-03 exclude *jagir* areas.

Note.—The figures for 1904-05 are subject to revision.

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PROVINCE	acres*	bales of 400 lb	PROVINCE	acres	bales of 400 lb
<i>Bengal</i>			<i>Cooch Bihar</i>		
1892	2,135,100	5,717,400	1903	23,200	(b) { 50,000 36,000
1893	2,222,600	5,001,700	1904	20,000	
1894	2,264,300	6,144,300			
1895	2,242,700	5,551,000			
1896	2,196,600	5,717,000	<i>Total</i>		
1897	2,151,600	6,839,000	1892	2,135,100	} See under Bengal
1898	1,624,400	5,334,000	1893	2,222,600	
1899	1,961,800	5,412,000	1894	2,264,300	
1900	2,093,400	(a) { 6,526,000	1895	2,242,700	
1901	2,263,800	7,438,000	1896	2,196,600	
1902	2,103,300	6,577,000	1897	2,151,600	
1903	2,213,600	7,241,000	1898	1,624,400	
1904	2,850,000	7,400,000(c)	1899	1,961,800	
			1900	2,093,400	
			1901	2,263,800	
<i>Assam</i>			1902	2,142,700	
1902	34,400	(b) { 48,000	1903	2,275,050	
1903	33,250	90,000	1904	2,899,700	
1904	29,700	40,000			

INDIGO

PROVINCE	acres	cwt	PROVINCE	acres	cwt
<i>Bengal</i>			<i>Madras—contd.</i>		
1892-93	645,950	92,006	1897-98	323,800	61,460
1893-94	645,928	67,285	1898-99	210,600	30,320
1894-95	629,100	104,485	1899-1900	249,000	33,340
1895-96	552,700	73,133	1900-01	251,900	46,100
1896-97	582,200	66,671	1901-02	239,400	38,480
1897-98	529,600	50,415	1902-03	212,200	40,260
1898-99	512,100	74,321	1903-01	211,900	45,900
1899-1900	449,200	44,996	1901-05	123,500	16,260
1900-01	360,600	47,707			
1901-02	311,200	41,820	<i>Panjab</i>		
1902-03	255,500	21,934	1891-92	52,200	9,256
1903-01	249,700	31,895	1892-93	65,300	10,085
1901-05	223,100	22,032	1893-94	110,700	15,946
			1894-95	124,200	24,005
<i>United Provinces</i>			1895-96	104,300	20,325
1891-92	201,369	20,583	1896-97	135,400	20,549
1892-93	206,516	26,545	1897-98	108,800	17,392
1893-94	349,980	38,106	1898-99	47,200	8,263
1894-95	420,213	41,521	1899-1900	97,300	15,577
1895-96	342,102	33,786	1900-01	115,700	22,693
1896-97	436,001	40,713	1901-02	71,000	13,533
1897-98	376,899	37,545	1902-03	42,000	7,016
1898-99	240,418	26,416	1903-01	74,200	12,184
1899-1900	231,400	17,977	1901-05	53,000	9,872
1900-01	262,175	31,529			
1901-02	168,990	18,986	<i>Total</i>		
1902-03	135,811	10,007	1891-92 (d)	410,590	48,320
1903-01	140,884	12,823	1892-93	1,218,768	179,056
1901-05	74,157	8,036	1893-94	1,552,008	179,437
1891-1901			1894-95	1,688,042	237,491
1892-1901			1895-96	1,414,002	190,521
1893-1901			1896-97	1,608,001	198,673
1894-1901			1897-98	1,339,090	166,812
1895-1901			1898-99	1,010,318	139,320
1896-1901			1899-1900	1,026,800	111,890
1897-1901	166,180	18,540	1900-01	990,375	148,029
1898-1901	301,000	50,420	1901-02	791,190	122,819
1899-1901	442,400	58,180	1902-03	645,511	79,207
1900-1901	514,600	67,480	1903-01	706,634	102,802
1901-1901	414,900	63,080	1901-05	473,757	56,200
1902-1901	454,700	50,740			

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area under jute in Bengal have been based on very uncertain data, but special efforts were made in 1904.

the statistics of trade and consumption, and including the production of Assam, Cooch Bihar, and Nepal.

(b) Included in the production of Bengal.

(c) Excluding Bengal.

Note.—The figures for 1904-05 are subject to revision.

EARTHNUT

EARLY					
PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Madras</i>			<i>Total</i>		
1895-96	243,400	(a)	1895-96	(d) 243,400	(b)
1896-97	157,300		1896-97	306,026	
1897-98	94,500		1897-98	214,803	(e) 55,962
1898-99	116,200		1898-99	217,814	(e) 70,561
1899-1900	102,000		1899-1900	173,946	(e) 9,250
1900-01	229,997		1900-01	294,408	(e) 28,631
1901-02	337,600		1901-02	434,222	(e) 63,293
1902-03	421,300		1902-03	491,155	(e) 61,851
1903-04	384,400		1903-04	474,193	(e) 94,419
1904-05	365,900		1904-05	428,104	(e) 43,036
<i>Bombay (including Native States)</i>					
1896-97	148,726	(b)			
1897-98	120,303		(c) 55,962		
1898-99	101,614		70,561		
1899-1900	71,946		9,250		
1900-01	64,411		28,631		
1901-02	96,622		63,293		
1902-03	69,855		61,851		
1903-04	89,793		94,409		
1904-05	60,204		43,036		

SUGARCANE

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Bengal</i>			<i>Madras</i>		
1898-99	861,100	871,435	1898-99	45,500	(b)
1899-1900	884,400	817,135	1899-1900	54,400	
1900-01	801,800	811,420	1900-01	55,400	109,400
1901-02	661,200	676,410	1901-02	51,100	93,400
1902-03	673,500	681,580	1902-03	46,500	83,700
1903-04	632,400	653,900	1903-04	44,300	90,000
1904-05	637,800	631,420	1904-05	48,200	
<i>United Provinces</i>			<i>N.-W. Frontier</i>		
1898-99	1,227,881	1,204,799	1901-02	23,900	21,339
1899-1900	1,259,070	838,885	1902-03	26,652	23,660
1900-01	1,212,456	1,193,214	1903-04	27,090	24,620
1901-02	1,228,681	976,222	1904-05	25,912	22,661
1902-03	1,151,777	904,132	<i>Total</i>		
1903-04	1,089,602	877,102	1898-99	2,485,681	2,076,777
1904-05	1,243,014	1,183,423	1899-1900	2,541,470	1,860,000
<i>Panjab</i>			1900-01	2,404,156	2,330,000
1898-99	351,200	(b)	1901-02	2,316,891	2,330,000
1899-1900	343,600	203,935	1902-03	2,207,823	2,330,000
1900-01	334,500	272,114	1903-04		
1901-02	351,500	239,105	1904-05		
1902-03	309,400	204,012			
1903-04	321,200	232,684			
1904-05	325,100	238,652			

(a) The average outturn per acre in Madras has been tentatively fixed at 1,120 lb of nuts in a year based on satisfactory tests. In Bombay where earthnut is mainly grown with the help of irrigation, the average outturn is 3,200 lb. (b) No information (c) Excluding Native States (d) Madras only (e) In Bombay the quantities are subject to revision

Note.—The figures for 1904-05 are subject to revision
G. I. C. P. O.—No. 1815 D. G. C. I.—31-5-1905—870.—L. G. G. & A.

consumption for the year ending 1904-05 or the quantities stated, but

